REPRESENTED BY
MINNESOTA SUPPLY COMPANY
706 Portland Avenue
Minneapolis 15, Minnesota

"A name to remember"

SUNDSTRAND

Sundstrand

PORTABLE AIR SANDERS

SUNDSTRAND MACHINE TOOL CO., PNEUMATIC DIVISION, ROCKFORD, ILLINOIS

BETTER, FASTER FINISHING

for production and maintenance jobs

SUNDSTRAND

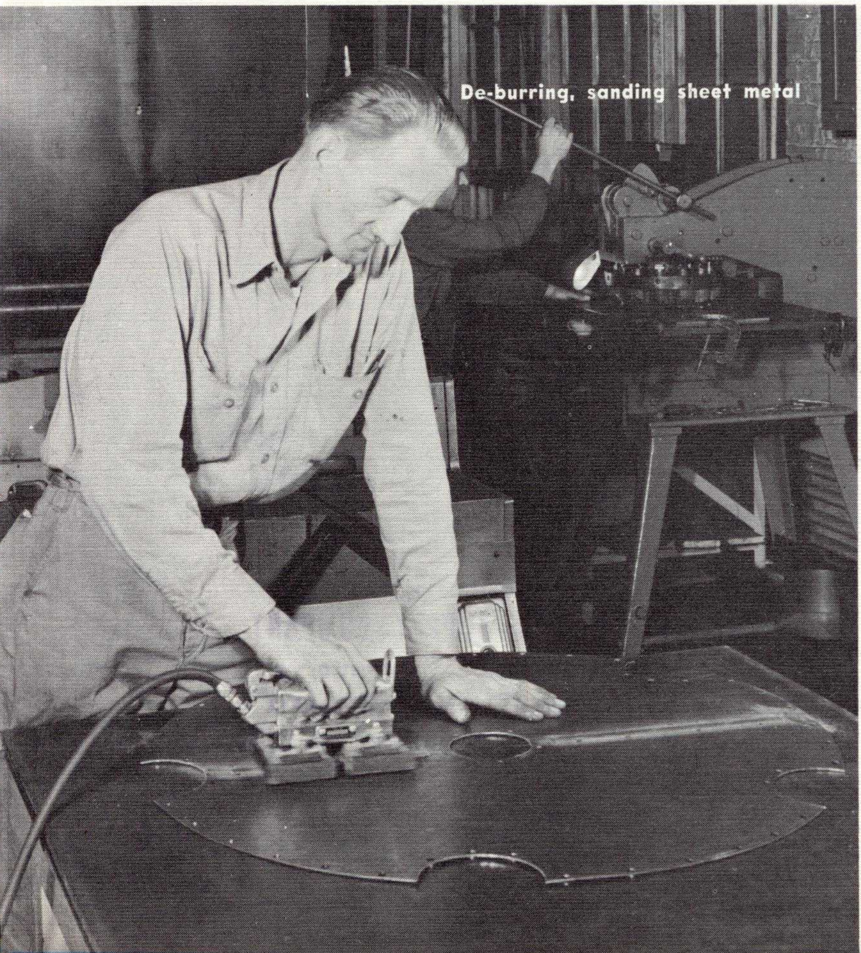
SUNDSTRAND AIR SANDERS

REPRESENTED BY
MINNESOTA SUPPLY COMPANY
706 Portland Avenue
Minneapolis 15, Minnesota

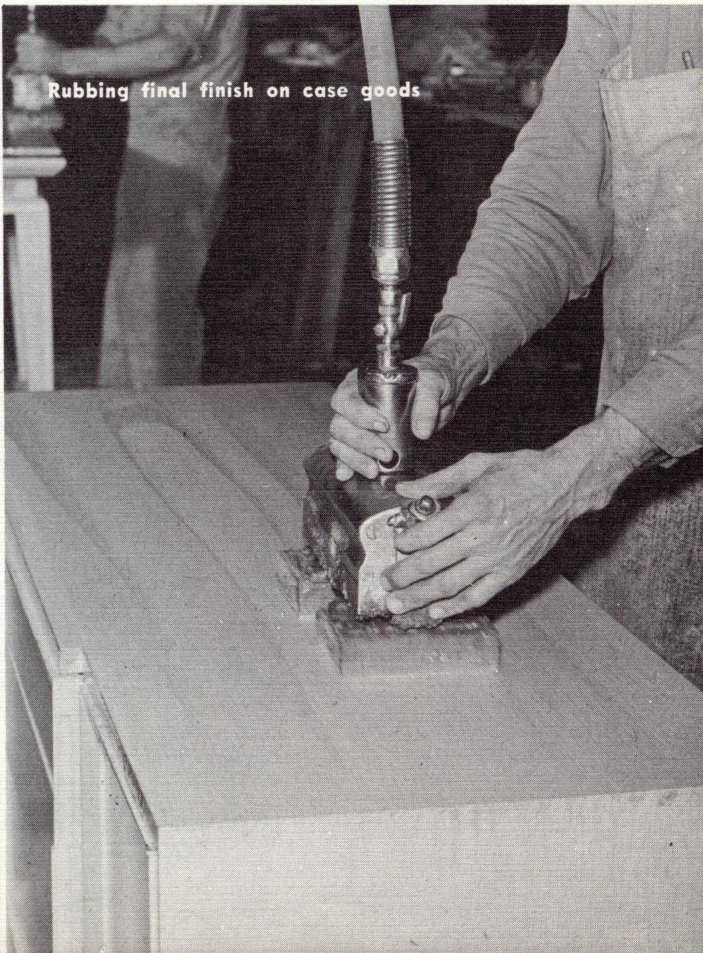
WITH STRAIGHT-LINE ACTION . . . NO SWIRLS, NO PRESSURE MARKS

Typical uses of SUNDSTRAND Air Sanders on maintenance and production jobs...

...producing better finishes with measurable savings in time, labor, and materials!



De-burring, sanding sheet metal

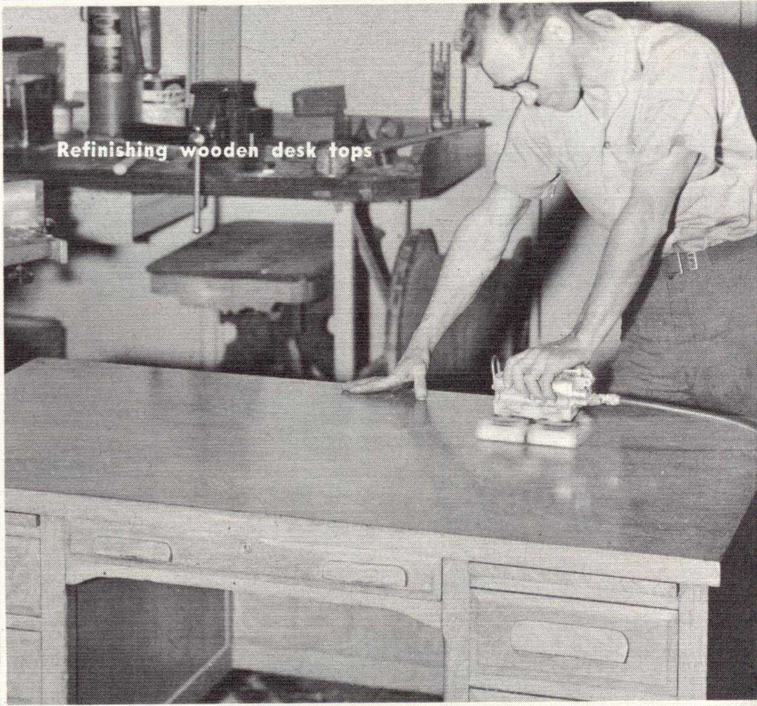


Rubbing final finish on case goods

Blending and graining stainless steel

Finishing tops of work benches

Sanding filler on castings



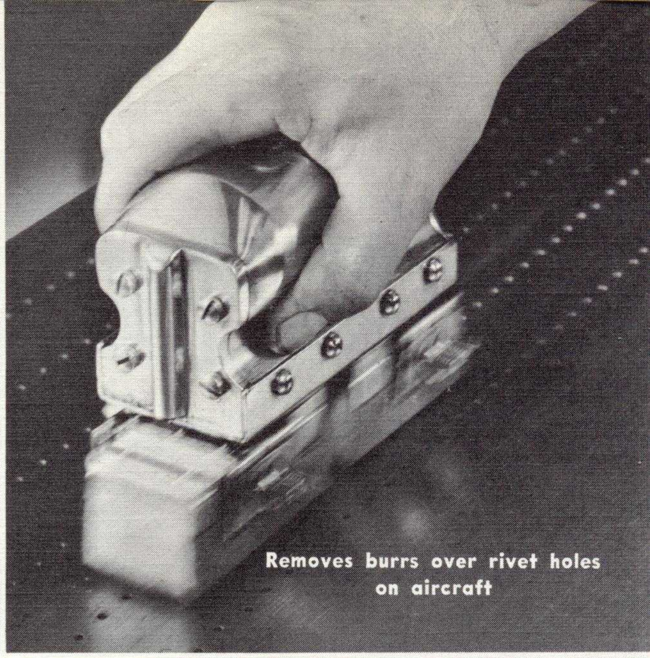
Refinishing wooden desk tops

Refinishing boats, inside and outside

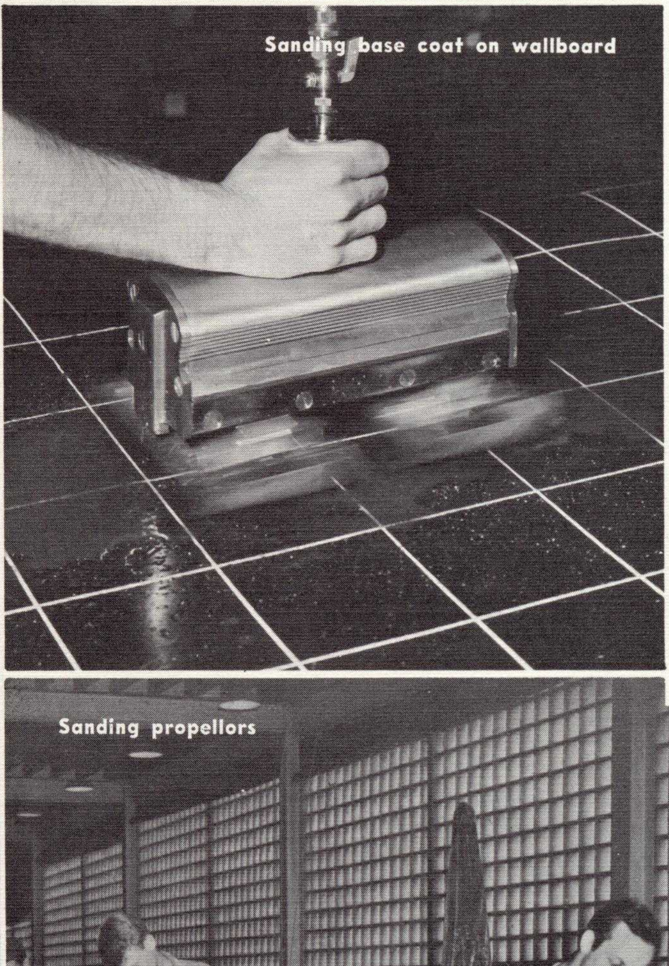
Preparing metal for priming and final finish

Sundstrand

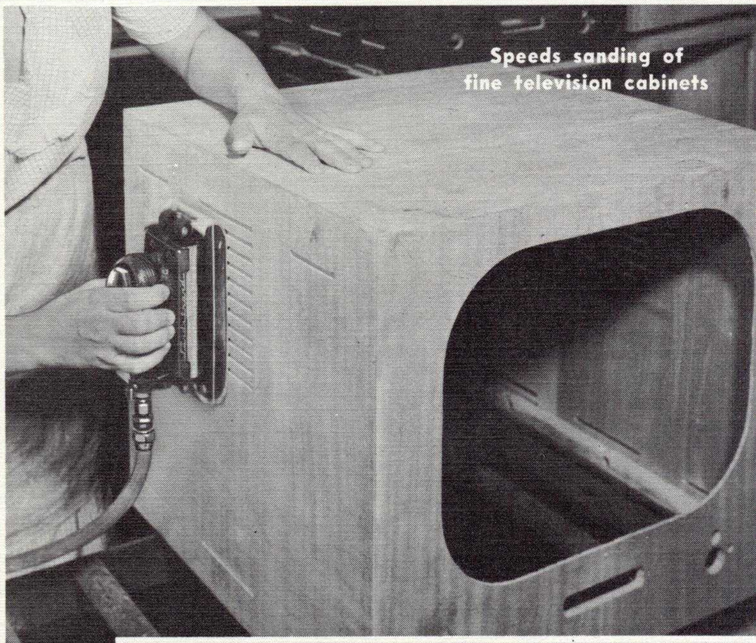
Polishes, removes scratches from dies



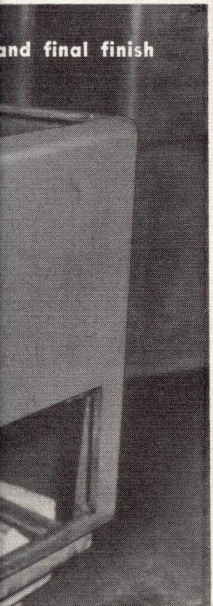
Removes burrs over rivet holes on aircraft



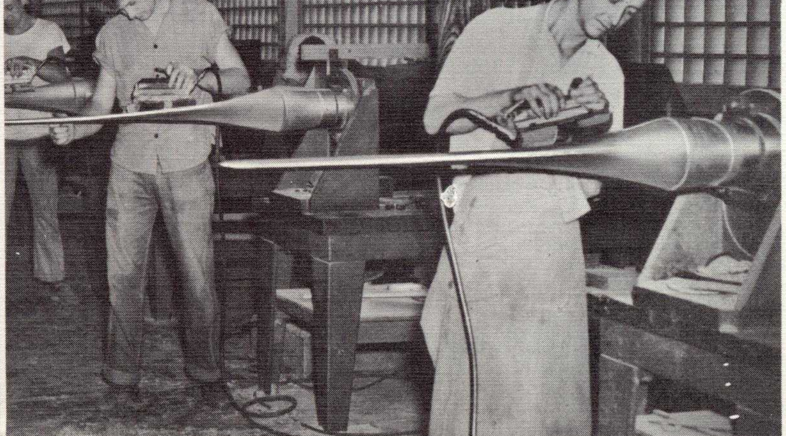
Sanding base coat on wallboard



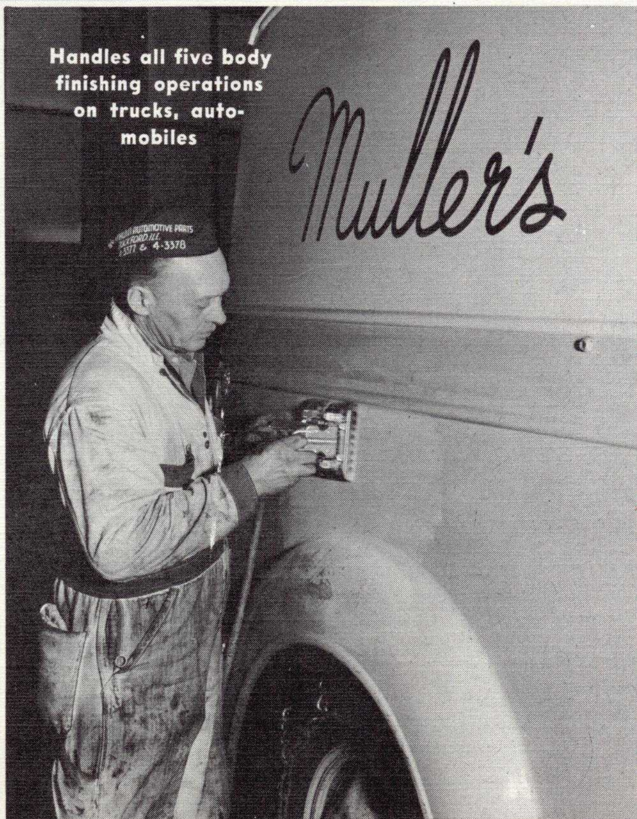
Speeds sanding of fine television cabinets



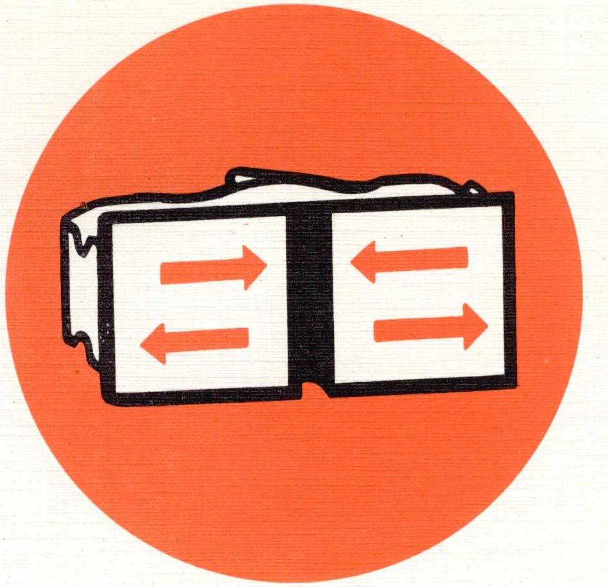
and final finish



Sanding propellors



Handles all five body finishing operations on trucks, automobiles



Use a SUNDSTRAND Air Sander with Straight-Line Action

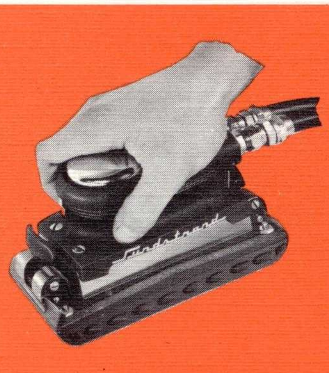
...for all finishing operations on wood, metal, plastics, etc.

In all of America's automobile manufacturing plants ... in major furniture and wood finishing plants throughout the world ... and in thousands of factories and shops handling production or maintenance jobs on metal, wood, or plastics ... Sundstrand Air Sanders are first choice.

And no wonder! Here is the pioneer line of air sanders with *straight-line* action ... duplicating hand sanding by moving the pad straight back and forth instead of in a circle ... leaves no swirls, no scratches, no pressure marks. You can use faster-cutting, coarser grit sandpaper, reducing sanding time ... minimizing trouble with paper "load-up". One sanding operation produces a fine, smooth finish on flat or curved surfaces — it's not necessary to employ tedious hand sanding or use a second mechanical sander to remove the scratches from the rough sanding operation. *One* machine handles *all* sanding, rubbing, and polishing operation (although you may prefer different weights of sanders for high production jobs).

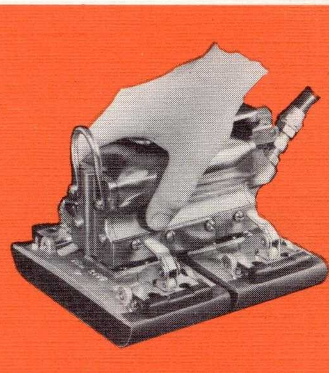
You can use a *straight-line* action sander next to edges, moldings, and in tight corners without fear of damage to work or without recourse to hand sanding. The *straight-line* action minimizes vibration — permits operators to produce more, at higher efficiency, with less fatigue. The smoother-operating sander requires less maintenance, lasts longer, costs less.

Couple the advantages of *straight-line* action with modern design, highest quality construction, and use of special materials resistant to wear and corrosion ... and you have the reasons why Sundstrand Air Sanders have become the *preferred* sander of operators everywhere.



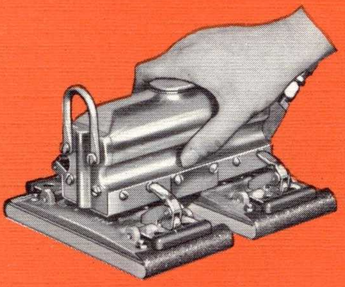
MODEL SP-101

A VERSATILE SINGLE-PAD SANDER—Only 5½ pounds, and smaller than the double-pad models, this sander is excellent for precision work on smaller pieces. Over 3,000 oscillations per minute. Palm lever control. Fits the hand perfectly. For dry or wet sanding.



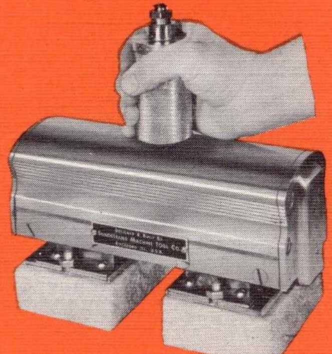
MODEL 1000

A LIGHT, FAST, EASY-TO-HANDLE MACHINE—ideal for all sanding and finishing operations. Generous abrasive area reduces sanding and rubbing time. Pad speed 2,500 oscillations per minute. Weight, approximately 7½ pounds. Palm lever control. For dry or wet sanding.



MODEL 4000

A SLIGHTLY HEAVIER UNIT—the Model 4000 is for use where a longer, slower stroke is desired. For dry or wet sanding. Weight, approximately 9 pounds. Pad speed of 2,100 oscillations per minute. Easily guided over flat or curved surfaces. Palm lever control.

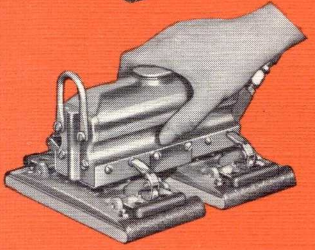


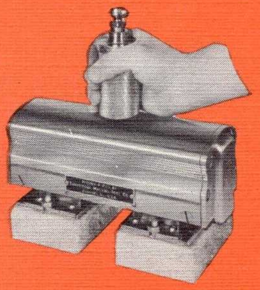
MODEL 600

A HEAVY DUTY MODEL—for sanding, pumice rubbing or polishing on large, flat surfaces. 30-pound weight gives necessary pressure for fast, fine finishing. Operation is practically effortless ... merely guide over the work. 1,100 oscillations per minute. Long (1½") stroke. For dry or wet sanding.

FOR COMPLETE SPECIFICATIONS SEE BACK PAGE

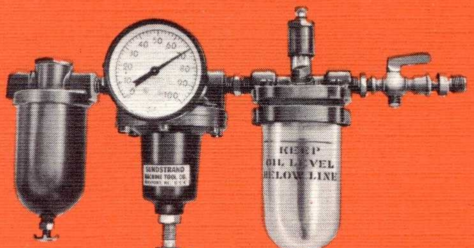
QUICK CHECK CHART . . . SPECIFICATIONS FOR SUNDSTRAND AIR SANDERS

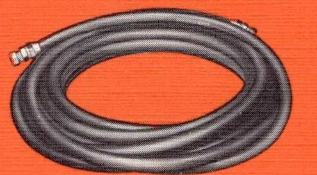




	Weight in Lbs.	Length of Stroke	No. of Pads	Direction of Pads	* Paper Capacity of Clips	Speed	Air Pressure Required	Wet or Dry Sanding
MODEL SP-101	5½	3/16″	1	Straight-Line Action	4 to 8 sheets	Over 3000 oscillations per minute	65 to 100 pounds	Yes
MODEL 1000	7½	7/16″	2	Opposed Straight-Line Action	4 to 8 sheets	2500 oscillations per minute	65 to 90 pounds	Yes
MODEL 4000	9	11/16″	2	Opposed Straight-Line Action	4 to 8 sheets	2100 oscillations per minute	65 to 90 pounds	Yes
MODEL 600	30	1½″	2	Opposed Straight-Line Action	4 to 8 sheets	1100 oscillations per minute	65 to 90 pounds	Yes

* Depending upon grit.





FOR THE BEST PERFORMANCE INSIST ON SUNDSTRAND ACCESSORIES

The long life and fine performance of your Sundstrand Air Sander is, like all fine machinery, dependent upon proper care and lubrication. For best results, be sure to equip your Sundstrand Air Sanders with the Sundstrand lubricator control unit consisting of filter and moisture trap, pressure regulator and gauge and automatic oiler. This combination of units is especially designed to provide the clean dry air, proper lubrication control and constant air control necessary for consistently fine finishing. Sundstrand's air and water hose is oil resisting, strong, flexible, light in weight and can be furnished in any length.

DISTRIBUTED BY

SUNDSTRAND

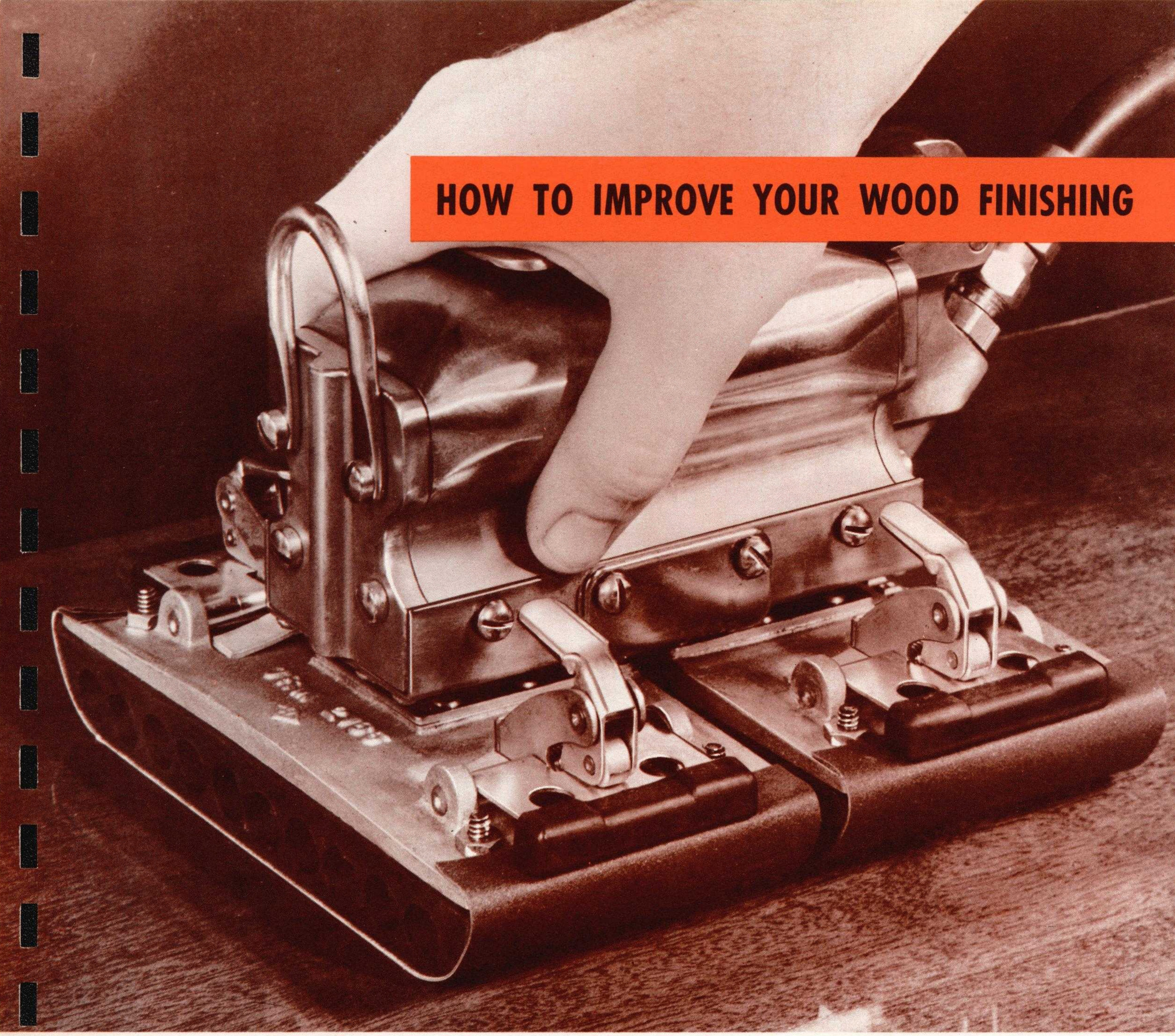
SUNDSTRAND AIR SANDERS

SUNDSTRAND MAGNETIC-PNEUMATIC PRODUCTS
DIVISION OF SUNDSTRAND MACHINE TOOL CO.
ROCKFORD, ILLINOIS, U.S.A.

FORM 2109

LITHO IN U. S. A.

HOW TO IMPROVE YOUR WOOD FINISHING



STRAIGHT LINE ACTION <<——>> NO SWIRLS, NO PRESSURE MARKS

SUNDSTRAND

SUNDSTRAND AIR SANDERS

FIRST CHOICE OF MAJOR FURNITURE AND WOOD FINISHING PLANTS THROUGHOUT THE WORLD

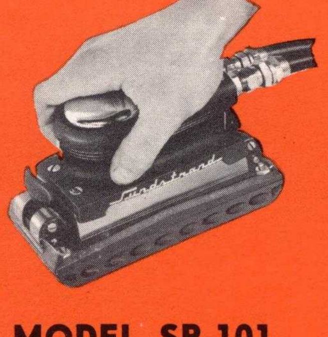
For all woodworking operations...use a SUNDSTRAND Air Sander with Straight-Line Action!

Fast, smooth, effortless sanding . . . that's what you get with a Sundstrand Air Sander. And, most important, you get a smooth, clear surface in each step of the wood finishing operation so that you *know* your final finish will be perfect.

Costly, time-consuming hand-sanding and rubbing is eliminated. Operator fatigue is cut to a minimum because the Sundstrand Sander is guided over the work practically without effort. Far greater efficiencies and product improvements result.

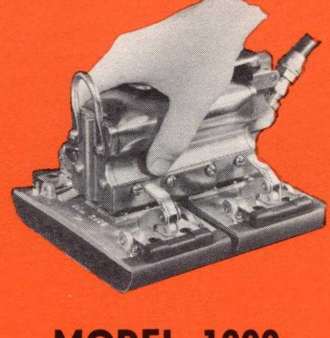
And, whatever the operation, from white sanding through final finish rubbing, *on flat or curved surfaces,* there's a Sundstrand to do it. The Sundstrand line includes single-pad models for small areas and double-pad models for speedy work on large areas . . . weights range from 5½ to 30 pounds to match your specific job requirements.

All models feature the famous Sundstrand *Straight-Line Action* that leaves neither swirls, nor pressure marks, making it doubly easy to faithfully follow the grain structure to produce a final effect varying from a dull satin to a high gloss or lustre finish.



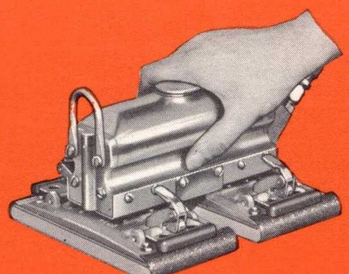
MODEL SP-101

A VERSATILE SINGLE-PAD SANDER. Light in weight, only 5½ pounds, and smaller than the double-pad models, this sander is excellent for precision work on smaller pieces. Has the famous Sundstrand *Straight-Line Action* with over 3,000 oscillations per minute. Palm lever control. Fits the hand perfectly. For dry or wet sanding.



MODEL 1000

A LIGHT, FAST, EASY-TO-HANDLE MACHINE ideal for all sanding and finishing operations. Generous abrasive area reduces sanding and rubbing time. Pad speed 2,500 oscillations per minute. Weight, approximately 7½ pounds. Palm lever control. For dry or wet sanding.

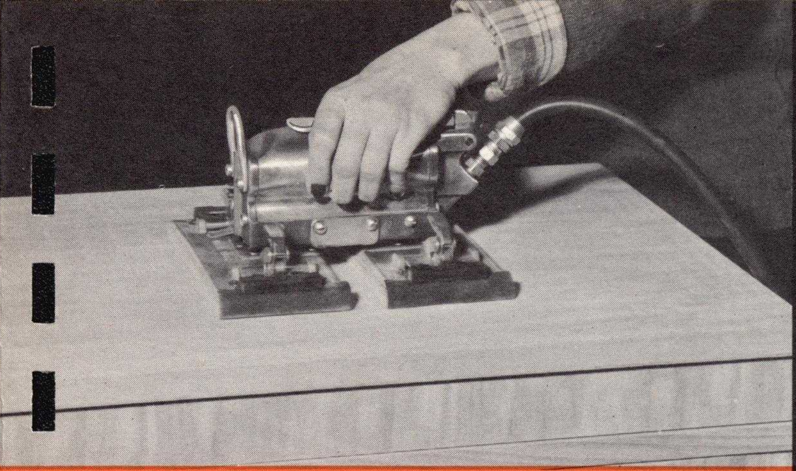


MODEL 4000

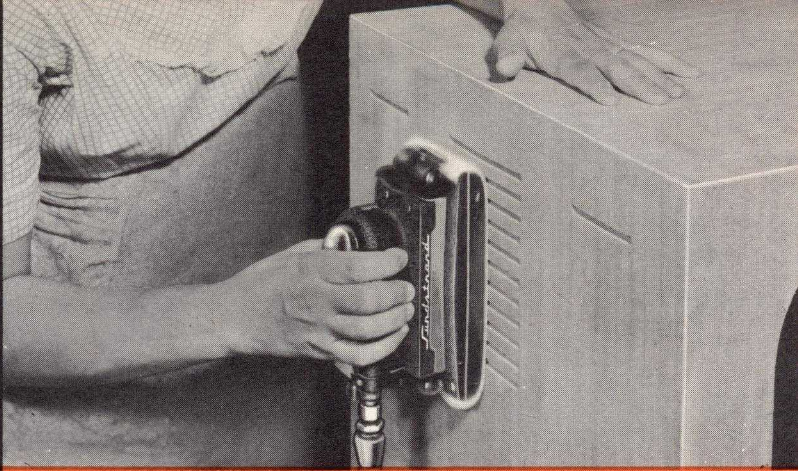
A SLIGHTLY HEAVIER UNIT the Model 4000 is for use where a longer, slower stroke is desired. For dry or wet sanding. Weight, approximately 9 pounds. Pad speed of 2,100 oscillations per minute. Easily handled. Palm lever control.

MODEL 600

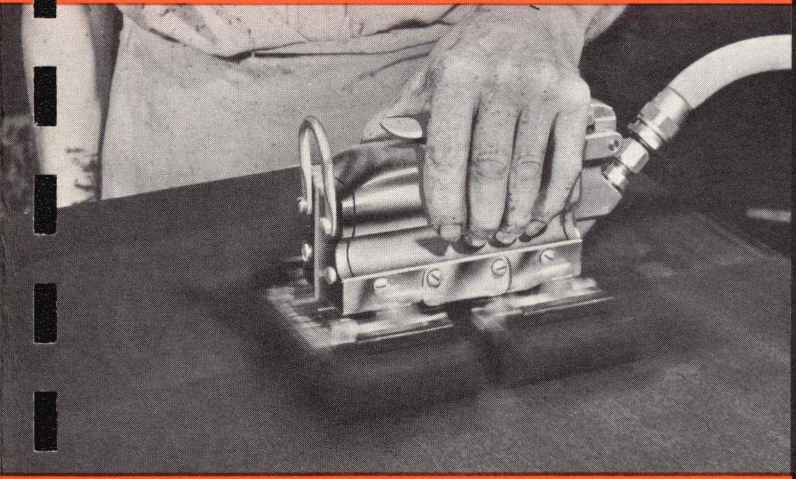
A HEAVY DUTY MODEL FOR SANDING, PUMICE RUBBING OR POLISHING ON large, flat surfaces. Weighs approximately 30 pounds to give necessary pressure for fast, fine finishing. Operation is practically effortless . . . merely guide over the work. Operates at 1,100 oscillations per minute. Long (1½") stroke. For dry or wet sanding.



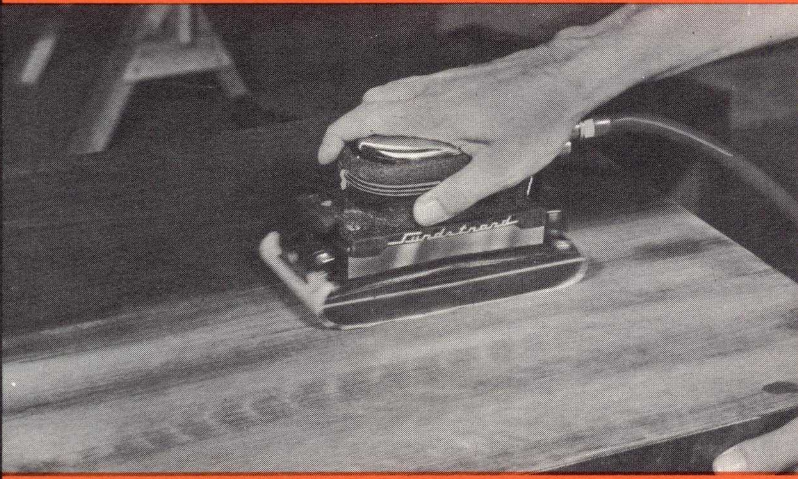
1. WHITE SANDING. The Sundstrand Air Sander will produce a level surface and remove press marks and other defects resulting from assembly. The use of these machines with hard felt pads and grit #5/0-180-A or #6/0-220-A abrasive paper reduces cabinet room sanding time to a minimum and assures a flat, smooth, surface.



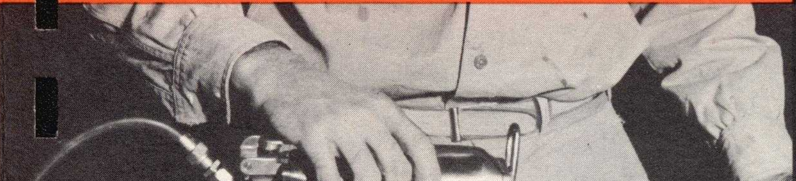
2. WASH COAT SANDING. The raised fibres, caused by staining or bleaching and stiffened for sanding by the wash coat, are quickly removed with a Sundstrand Sander using a soft rubber pad and grit #7/0-240-A or #8/0-280-A abrasive paper. The soft rubber pad will prevent the cutting through of any high spots or other irregularities due to improper white sanding.

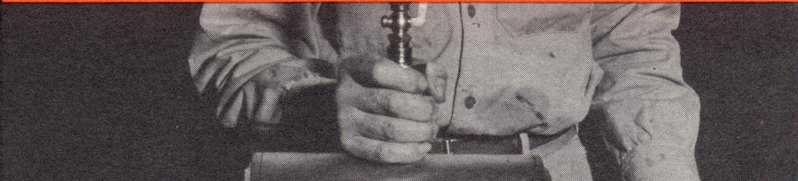


3. PADDING FILLER. Thin-woven, wrap-around felt pads applied to the Sundstrand Sander will give results superior to those obtained by hand padding. The machine is operated cross-grain first, then the surface is cleaned up with a series of passes with the grain. The remaining filler is easily wiped off. For this operation we recommend the Model 4000 Sander.



4. SEALER SANDING. Orange peel, pock and dirt are quickly and completely removed with a Sundstrand Sander using soft rubber pads and grit #220-A abrasive paper. This provides a blemish-free base that will produce a clear final finish. The soft pad will prevent the possibility of cutting through any remaining high spots.



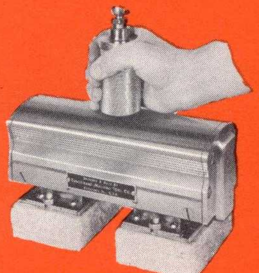


5. FINAL FINISH RUBBING. Finish coat of varnish or lacquer can be rubbed with a Sundstrand Sander to produce a final effect varying from a dull satin to a high gloss or lustre finish. The initial cutting down of the orange peel can be done with a soft felt or rubber pad and grit #280, 320, or 360 waterproof abrasive paper. Lubricant can be water with a softener or rubbing oil cut with oleum spirits or equivalent. If it is found that the waterproof abrasive paper streaks the varnish finish, it will be necessary to rub with various grits of pumice stone.

A satin finish is then obtained by going over the surface with one of the following grits, #400 or 500 waterproof abrasive paper, 4/F pumice stone or 4/0 steel wool.

A high-lustre finish is obtained by following the abrasive paper with polishing compound or rottenstone. For all of these operations, any one of the Sundstrand Sanders can be used.

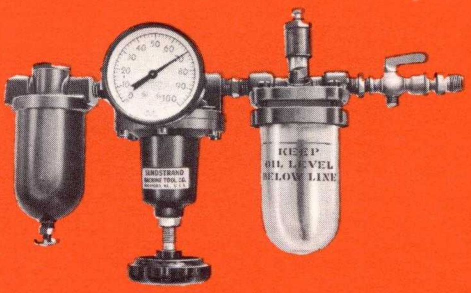
QUICK CHECK CHART . . . SPECIFICATIONS FOR SUNDSTRAND AIR SANDERS



	Weight in Lbs.	Length of Stroke	No. of Pads	Direction of Pads	* Paper Capacity of Clips	Speed	Air Pressure Required	Wet or Dry Sandin
MODEL SP-101	5½	3/16″	1	Straight-Line Action	4 to 8 sheets	Over 3000 oscillations per minute	65 to 100 pounds	Yes
MODEL 1000	7½	7/16″	2	Opposed Straight-Line Action	4 to 8 sheets	2500 oscillations per minute	65 to 90 pounds	Yes
MODEL 4000	9	11/16″	2	Opposed Straight-Line Action	4 to 8 sheets	2100 oscillations per minute	65 to 90 pounds	Yes
MODEL 600	30	1½″	2	Opposed Straight-Line Action	4 to 8 sheets	1100 oscillations per minute	65 to 90 pounds	Yes

* Depending upon grit.

FOR THE BEST OF PERFORMANCE INSIST ON SUNDSTRAND ACCESSORIES



The long life and fine performance of your Sundstrand Air Sander is, like all fine machinery, dependent upon proper care and lubrication. For best results, be sure to equip your Sundstrand Air Sanders with the Sundstrand lubricator control unit consisting of filter and moisture trap, pressure regulator and gauge and automatic oiler. This combination of units is especially designed to provide the clean dry air, proper lubrication control and constant air control necessary for consistently fine finishing.

DISTRIBUTED BY

SUNDSTRAND

SUNDSTRAND
AIR SANDERS
SUNDSTRAND MACHINE TOOL CO.
PNEUMATIC DIVISION, ROCKFORD, ILL., U. S. A.

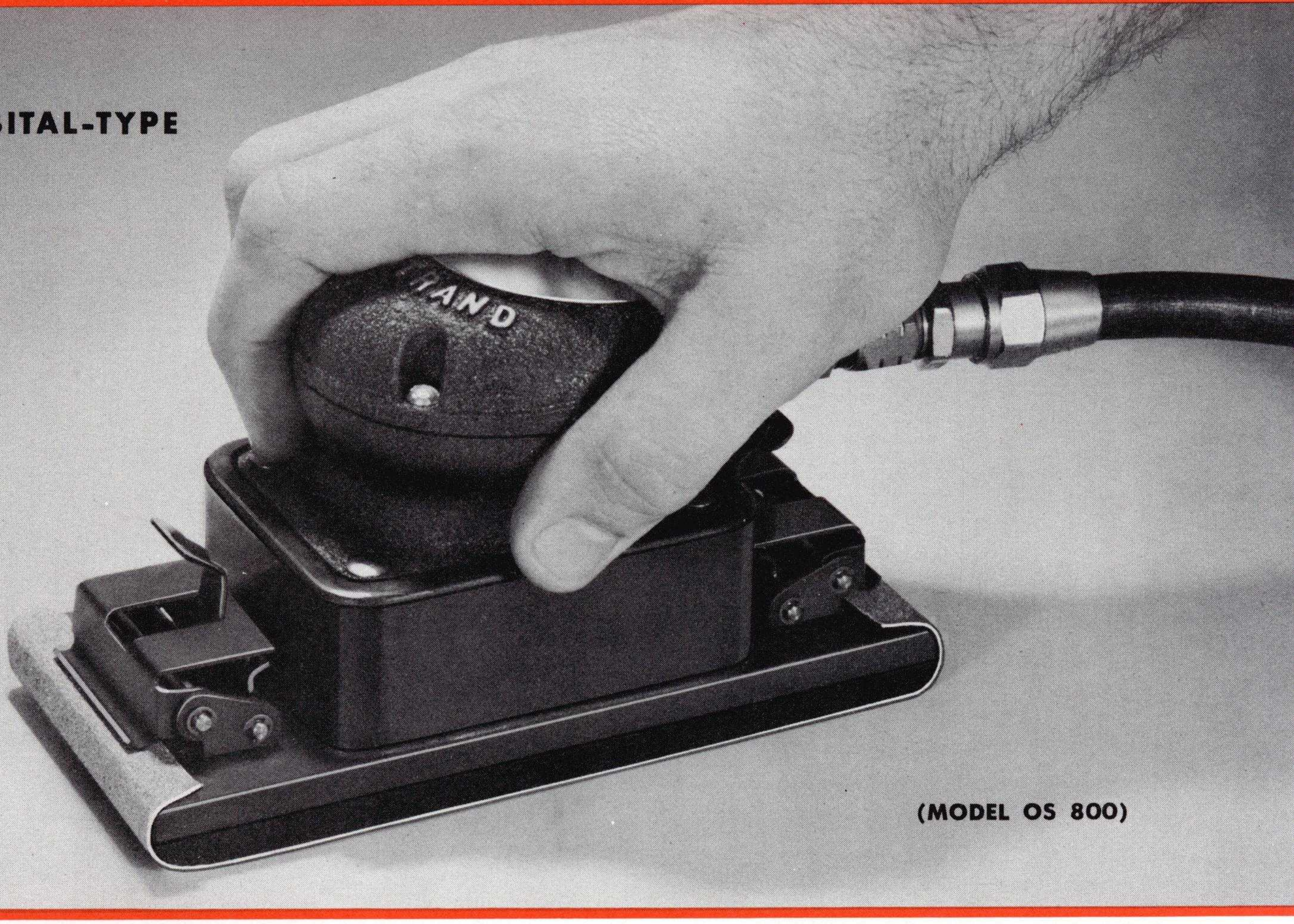
FORM 2102

LITHO IN U. S. A.

Model OS-800

NEW LIGHTEST WEIGHT *Air Sander* ON THE MARKET

ORBITAL-TYPE



(MODEL OS 800)

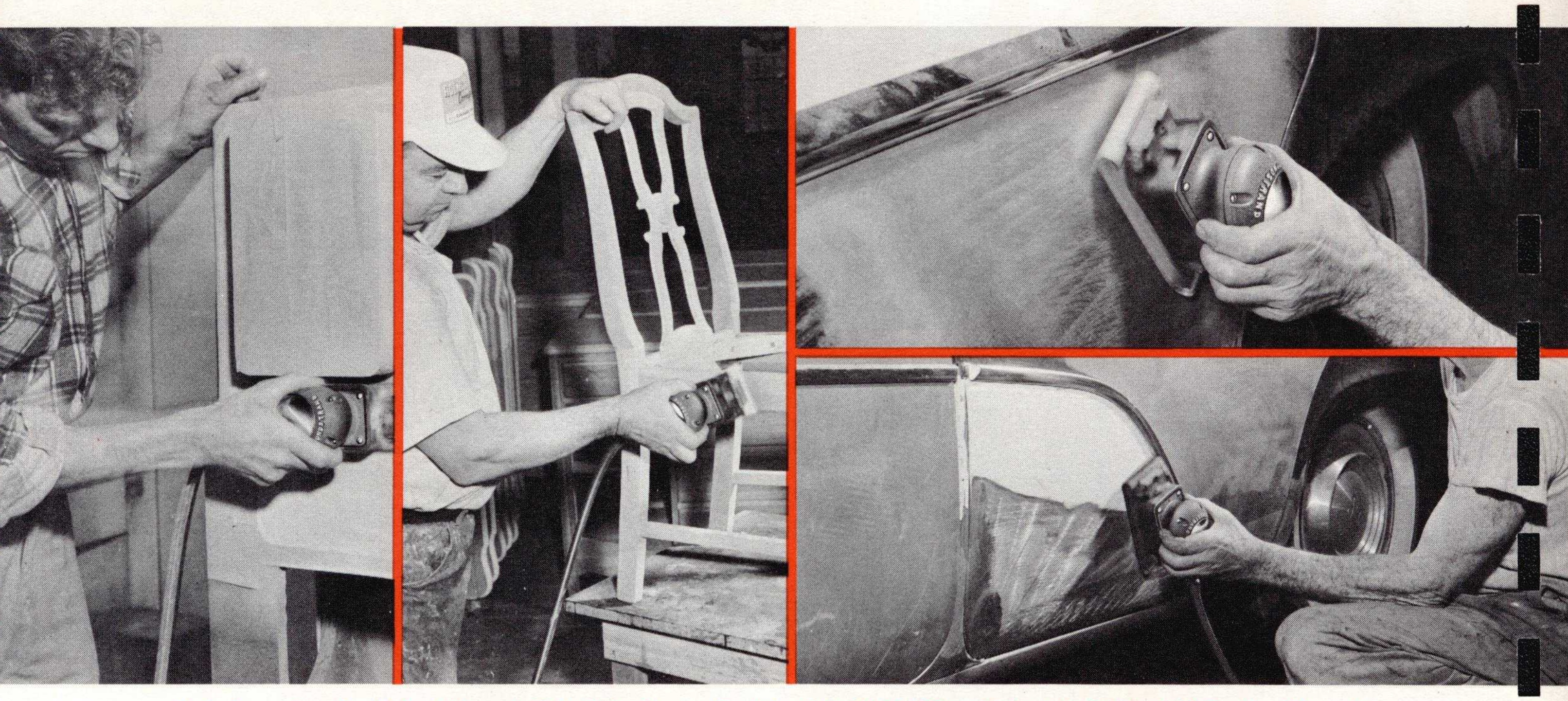
SMALL . . . COMPACT . . . LOW COST . . . unequalled SUNDSTRAND quality!

Sundstrand's done it again! This time it's the lightest weight air sander on the market — a smooth, easily handled, orbital-type sander that can go just about anywhere your hand can reach.

- Fits snugly into the palm of your hand — easy palm lever control — ideal for restricted areas, vertical surfaces — no vibration — reduces operator fatigue to a minimum.
- Removes material F-A-S-T! Sands right up to edges and moldings — can't be beat for rough sanding and preliminary operations.
- Operates at 6000 cycles — low air consumption.
- Precision parts mass-produced with Sundstrand "know-how" for exceptional quality and long life at minimum cost to you.

Newest addition to the complete Sundstrand line of straight-line and orbital air sanders

Use in restricted areas... on small objects... does a wonderful job anywhere!



Typical operations handled quickly and efficiently by the new Sundstrand Model OS 800 sander include: (Left to right) Sanding filler on heavy industrial castings; white and sealer sanding of furniture; and removing grinding marks (above) and feather edging (below) in autobody work.

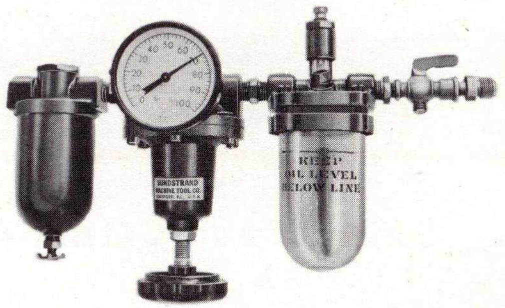
HERE'S WHAT YOU GET:

- Small, compact unit — can be used on large or small areas.
- Lightweight — weighs only 3 lbs — can be guided practically without effort.
- Counterbalanced — spring-mounted — to minimize fatiguing vibration.
- High-speed — 6000 cycles — for fast material removal.
- Low air consumption.
- Wet or dry sanding — for wet sanding, operator provides separate supply of water.
- High-quality, low-cost — due to Sundstrand's strict standards, extensive production experience.

SPECIFICATIONS

Model No.	Weight	Circular Action	No. of Pads	Direction of Pads	Size of Paper	Speed	Air Pres. Required	Wet or Dry Sanding
OS 800	3 lbs	3/16"	1	Orbital	3x8"	6000 cycles	75 psi	Yes

For finest performance use Sundstrand accessories



Moisture trap and air cleaner — air pressure regulator — lubricator units — a combination of accessories especially designed to provide the clean, dry air, proper lubrication, and constant air control necessary for consistently fine results with your Sundstrand Air Sanders.

SUNDSTRAND

SUNDSTRAND AIR SANDERS

SUNDSTRAND MAGNETIC-PNEUMATIC PRODUCTS
DIVISION OF SUNDSTRAND MACHINE TOOL CO.
ROCKFORD, ILLINOIS, U.S.A.

Form MS51 .803-38

Printed in U.S.A.

MODEL OS-800 *Single Pad — Orbital Action*

*OS-800	SINGLE-PAD AIR SANDER WITH RUBBER PAD		$69.50
*OS-800	SINGLE-PAD AIR SANDER WITH FELT PAD		$69.50
	1002234 RUBBER PAD ASSEMBLY	$6.50	
	1002235 FELT PAD ASSEMBLY	$6.50	

Above Pad Assembly includes Pad, Shoe and Sandpaper Clamps.

*Note: Hose connections on Sander may be had with either 1/4" pipe to 1/4-18 straight pipe thread (1002228) or 9/16-20 thread (10501).

1/4" LUBRICATOR AND AIR CONTROL UNIT

(One for each sander)

COMPLETE — Filter, Regulator, Gauge and Oiler — 1001925			$31.20
Oiler only (10407)	$12.00	COMBINATION	
Filter only (10409)	9.00		
Regulator only (10410)	8.45	Oiler-Filter (10412)	$21.00
Gauge only (10411)	1.75	Regulator-Gauge (1001924)	$10.20

HOSE

*15 Ft.	URM-1112	1/4" Air Hose, with couplings	$ 4.95
*25 Ft.	URM-1111	1/4" Air Hose, with couplings	$ 6.95
*50 Ft.	C-4147	1/4" Air Hose, with couplings	$11.95

*Couplings on hose may be had with either 1/4-18 pipe thread (C-3876 Couplings), or 9/16-20 thread (C-3804 Couplings).

COUPLINGS only, 1/4-18 p.t. (C-3876), or 9/16-20 (C-3804)	.75 ea.

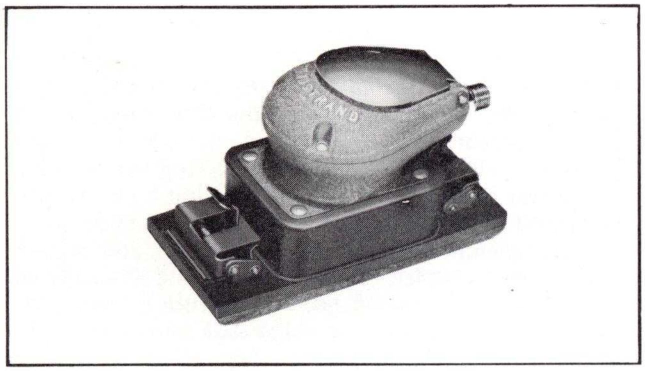
Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

Operating and Service Information for
SUNDSTRAND OS 800 ORBITAL AIR SANDER

SPECIFICATIONS

Diameter of Orbit: 3/16".
Speed: Up to 6000 cycles per minute at 75 P.S.I.
Paper Size: 3" x 8".
Paper Capacity of Clips: 4 to 6 sheets.
Air Pressure: 75 pounds.

The Sundstrand Orbital Sander is made for production type work and can be expected to give long and trouble free service when installed as recommended and given reasonable care.



CORRECT AUXILIARY EQUIPMENT

It is recommended that the Sundstrand Orbital machine be installed with a moisture trap and air cleaner, pressure regulator, and automatic lubricator arranged as shown in figure 1. USE SUNDSTRAND OIL RESISTANT HOSE for air line.

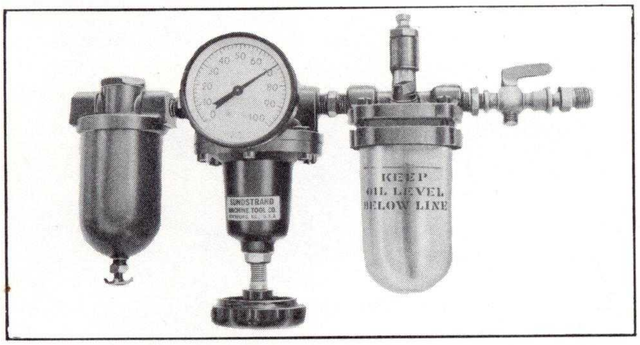


FIG. 1

MOISTURE TRAP AND AIR CLEANER

Clean dry air is essential to satisfactory operation of any air tool. With a moisture trap and air cleaner, the lint, scale, and other impurities as well as moisture in the air can be removed before reaching the machine. The moisture trap should be cleaned frequently.

LUBRICATION

Either a fog type or drip type lubricator can be used with this machine. See tabulation below for setting rate of oil flow for each type lubricator.

Fog Type Lubricator—5 drops per minute through sight glass.
Drip Type Lubricator—1 drop per two minutes through sight glass.

For applications where oil can not be tolerated in the air lines because of paint spray equipment, etc. manual lubrication is permissible. It is essential, when manual method of lubricating is used, to introduce 5 to 10 drops of oil into the machine every hour during the first 50 hours of operation. After the machine has passed this initial run in period, less lubricant may be used. The stated amount of oil for manual lubrication is less than normally supplied by an automatic lubricator, therefore, during the break in period, a lack of power may be evident, as a result of friction. In case this condition occurs, increase the frequency of lubricating the machine during the normal run in period.

SUNDSTRAND PNEUMATIC MACHINE LUBRICANT IS RECOMMENDED for use with this sander. Both the lubricant and the assembly shown in figure 1 are available from SUNDSTRAND MAGNETIC-PNEUMATIC PRODUCTS DIV. OF SUNDSTRAND MACHINE TOOL CO., ROCKFORD, ILLINOIS. In the event the recommended lubricant is not used, substitute a good grade of non detergent lubricating oil not heavier than SAE 10.

HOW TO CHANGE PAPER

The spring clips of the sander will hold four to six sheets of abrasive paper depending upon the coarseness of the grit. Fasten one end of the abrasive sheets under one clip, then stretch the paper snugly over the pad, and attach it in place by means of the clip at the opposite end.

TOOLS REQUIRED FOR SERVICE

The Orbital Sander is designed to provide ease of maintenance and may be serviced with a minimum of tools. The tools required are shown in figure 2.

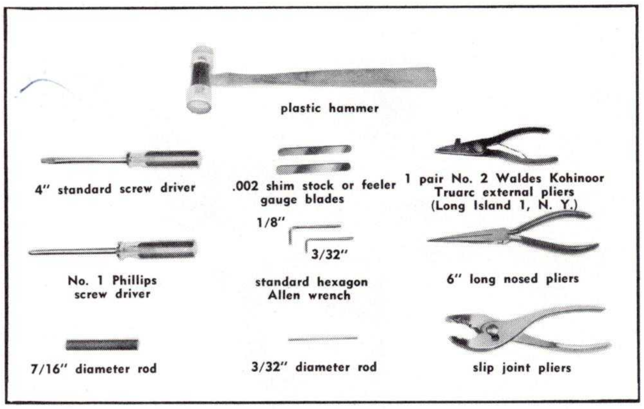

plastic hammer
4" standard screw driver
.002 shim stock or feeler gauge blades
1 pair No. 2 Waldes Kohinoor Truarc external pliers (Long Island 1, N. Y.)
1/8"
3/32"
No. 1 Phillips screw driver
standard hexagon Allen wrench
6" long nosed pliers
7/16" diameter rod
3/32" diameter rod
slip joint pliers

FIG. 2

SANDER SERVICE INFORMATION (DISASSEMBLY OF MACHINE)

The first step in the disassembly of this unit is to remove the pad assembly (1002234 or 1002235) by removing the four No. 10-24 round head screws (22058). Next strip the dust enclosure (1002231) off its retaining lip around the bottom of the housing assembly (1002227) and slide it down and off the shoe assembly (1002233). Now lightly clamp the sander upside down in a vise and with a pair of pliers remove the bearing seal (1005311). Next grasp the lower counter-weight (1002229) with pliers to prevent drive shaft from rotating while the taper plug (1005102) is removed from the eccentric end of the drive shaft as shown in Fig. 3.

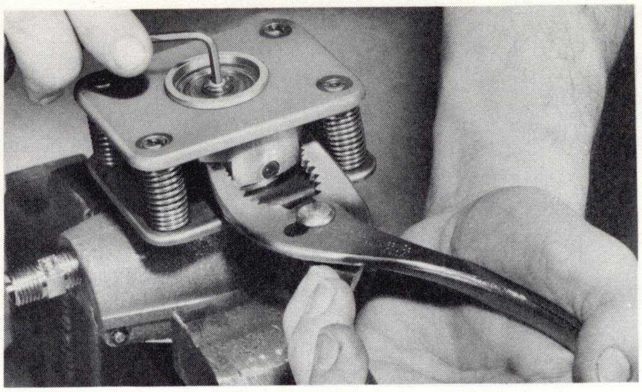


FIG. 3

Remove retaining ring (20307) and shim washers (1004992). Now remove the shoe assembly from the sander by applying a steady even pull. Unscrew No. 8-32 (22847) socket head cap screw contained in lower counterweight using $1/8''$ hexagon Allen wrench and remove both parts from drive shaft.

The sander can now be removed from the vise and set upright on a work bench. Next remove one of the two Truarc retaining rings (29286) assembled on the lever pin (1002223). Use a 3/32″ diameter rod as a drift pin; push lever pin out of valve housing (1002271) and actuating lever (1002221). Lift the actuating lever off the valve housing. Remove the four No. 6-32 Phillips head screws (22059) holding the valve housing, then lift the valve housing off the housing assembly. The motor assembly (1002236) is now accessible and may be removed as a unit by pulling it from the bore of the housing.

DISASSEMBLY OF AIR MOTOR

Grasp the upper counterweight (1002266) with a pair of slip joint pliers to prevent shaft (1002262) from turning and remove the No. 10-24 round head screw (22058) from the shaft as shown in Fig. 4.

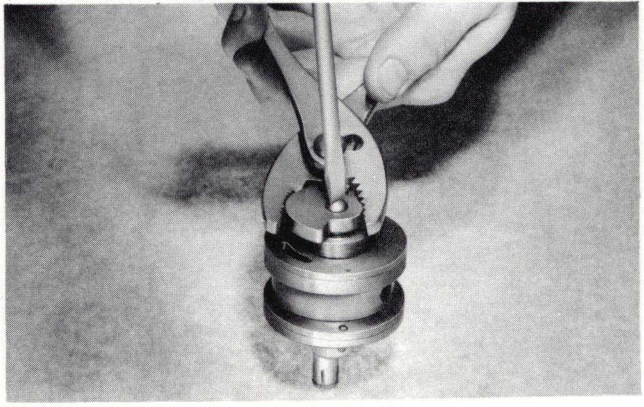


FIG. 4

Remove the upper counterweight and bearing preload spring (1002265) from the shaft. The inlet end plate assembly (1002238) may now be lifted off the shaft. Next the rotor housing assembly (1002240) may be lifted off the lower end plate assembly (1002242). The five vanes (1002264) may now be removed from the rotor. To remove the rotor (1002263) from the shaft unscrew the No. 10-32 hexagon socket head set screw (23710) in the side of the rotor approximately 3/32″ using a 3/32″ hexagon Allen wrench and pull the rotor off the shaft. The lower end plate assembly may now be pulled off the shaft to complete the motor disassembly.

CAUTION: The rotor and rotor housing are group sized to provide a correct running clearance of .004″. The parts are stamped A. or B., etc., and if replacement of one part is required, it is important to order parts stamped with the same letter. If both parts are replaced, any letter can be used, but both parts must have the same letter.

ASSEMBLY OF MACHINE

Assembly may be made by reversing the foregoing procedure and following the additional instructions as outlined. If examination shows no excessive radial wear of end plate bearings, and if bearings feel smooth with no excessive bind as inner races are rotated, bearings need not be replaced. Some axial wear is permissible. However, if bearings need be replaced, use an arbor press and a 7/16″ diameter rod to press bearing out of end plates, being careful to support end plates on the 1-5/32″ diameter hub and not on the thin flange or under-surface. Working against the thin flange would cause permanent deflection of end plate, which would affect motor efficiency. To replace bearing use an arbor press to seat bearing in bottom of bearing bore. Inspect shaft (1002262) for excessive wear. Now slide lower end plate assembly (1002242) on the shaft and register against shaft shoulder. Next slide rotor (1002263) on shaft; using two pieces of .002″ shim stock or two .002″ feeler gauge blades, one on either side of the shaft, located between the rotor and the face of the lower end plate assembly. Tighten socket head set screw (23710) against flat provided on the shaft exerting sufficient finger pressure between rotor and eccentric end of shaft while tightening set screw. There should be a noticeable drag on shim stock when it is removed. Refer to Fig. 5.

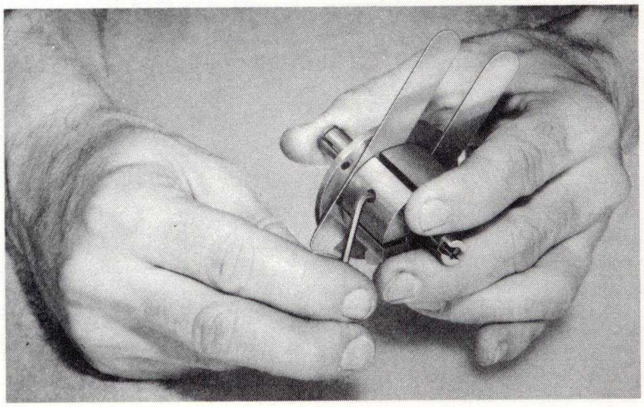


FIG. 5

With the shim stock pieces removed and rotor properly located on shaft as described above, the rotor housing (1002240) can now be placed on the lower end plate assembly and the five vanes (1002264) inserted into the rotor vane slots. Next place the inlet end plate assembly (1002238) over the shaft and against the rotor housing assembly. The bearing preload spring (1002265) is next placed over the shaft and then the upper counterweight (1002266) is assembled on the shaft and held in place by the No. 10-24 round head screw (22058). The upper counterweight must be positioned so that its balancing mass and the throw of the shaft eccentric lie on the same side, never 180° opposed as this could cause a severe out of balance condition when the sander is operating. See Fig. 6.

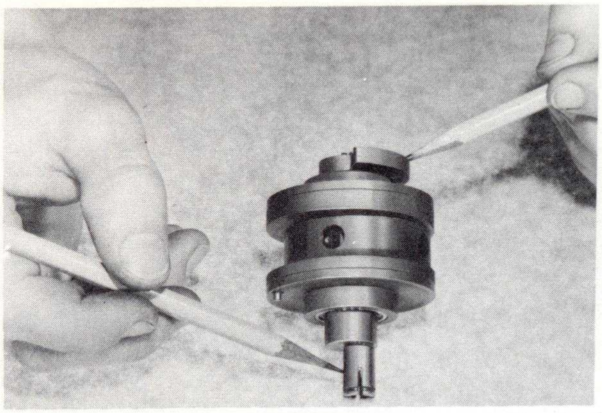


FIG. 6

The function of the bearing preload spring is to load the bearings in the motor assembly to remove axial play in the bearings. This will maintain the .002 clearance between the lower end plate assembly and the bottom surface of the rotor, which was established in the previously discussed shimming operation.

The motor assembly (1002236) may now be placed in the housing assembly (1002227) bore, aligning 3/32″ locating pin in bottom of motor assembly with alignment hole provided in the housing assembly plate. Next place the valve spring (850841) in the 3/8″ diameter hole provided in the housing assembly; place the 9/32″ diameter ball (24504) on top of the valve spring. Apply grease to the two c'bores in the valve housing (1002271) and locate the valve seat (1002225) and seal washer (1002283) in their respective c'bores. The grease will hold the washers in place while further assembly is made.

Check to determine if the valve stem assembly (1002437) is properly located in valve housing and then attach the valve housing to the housing assembly with the four No. 6-32 Phillips head screws (22059). Complete the upper part of the sander by assembling the actuating lever (1002221), lever pin (1002223) and Truarc retaining ring (29286).

If orbiting springs (1002230) need be replaced, remove the spring from housing assembly first, by exerting a force on the end of the spring, using a small screw driver or similar tool which will expand the pitch diameter of the spring sufficiently to free the interference fit and allow unthreading from the stud. The free stud (1002237) can be removed from the orbiting spring by following a like procedure. Note: The studs are made with left hand threads and the orbiting springs are left hand wound.

To assemble new orbiting springs, first thread spring on the stud fastened to the housing assembly until the end of the spring contacts the base plate. Then thread the lower spring stud into the orbiting spring until the end of the spring is flush with the shoulder of the threaded body of the stud, leaving the small diameter extending beyond the end of the spring to act as a locator in the holes of the shoe assembly (1002233).

Lightly clamp the sander upside down in a vise and attach the lower counterweight (1002229) to the drive shaft. The drive shaft is tapped from one side only to receive the No. 8-32 socket head cap screw (22847).

The shoe assembly can now be attached to the sander shaft. Be sure that the four spring studs project through the four 5/16″ holes in the shoe plate. Apply Molycote Type "G" or an equivalent anti-seize compound to taper plug (1005102) prior to tightening into shaft to prevent galling or seizing on the threads. This assures easy removal of the taper plug, if necessary. Tighten taper plug to expand shaft applying 45 in. lbs. torque. If a torque wrench is not available, set plug with standard 1/8 hexagon Allen wrench using short leg in socket. The taper plug must be extremely tight. The force necessary to tighten will deflect the long leg of the wrench 10° after plug will no longer turn. It is important that the taper plug be tightened as specified to expand the eccentric end of the shaft to cause an interference fit with the bearing in the shoe assembly; this in conjunction with the shim washers (1004992) and the Truarc retaining ring (20307) at the end of the shaft locks together the complete assembly. When tightening plug, a downward pressure on shoe assembly must be maintained against the four springs so the inner race of the bearing and the shaft shoulder are maintained in contact as shown in Fig. 7.

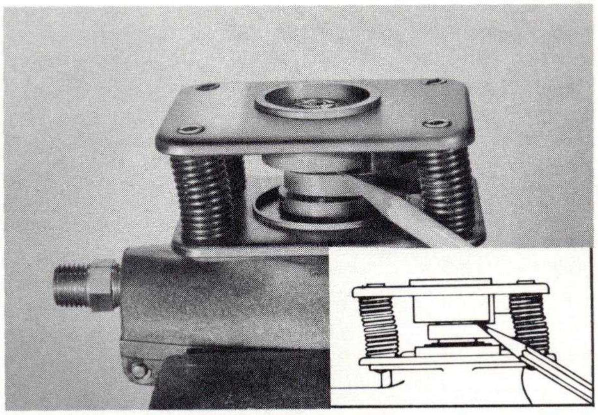


FIG. 7

Fill the cavity in the shoe assembly below the bearing with a good grade of bearing grease and press a new bearing seal (1005311) into place.

Slip the dust enclosure (1002231) over the shoe assembly and slide it down to the under side of the steel flange, but do not at this time snap dust enclosure around steel flange. Next place pad assembly (1002234 or 1002235) into proper location and draw it and bottom flange of dust enclosure into position against shoe assembly by tightening four No. 10-24 round head screws (22058). See Fig. 8.

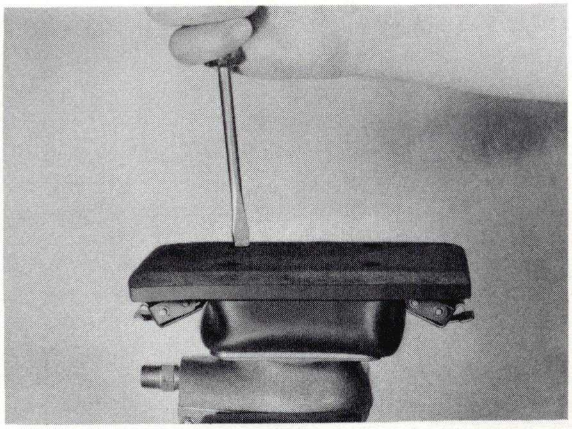
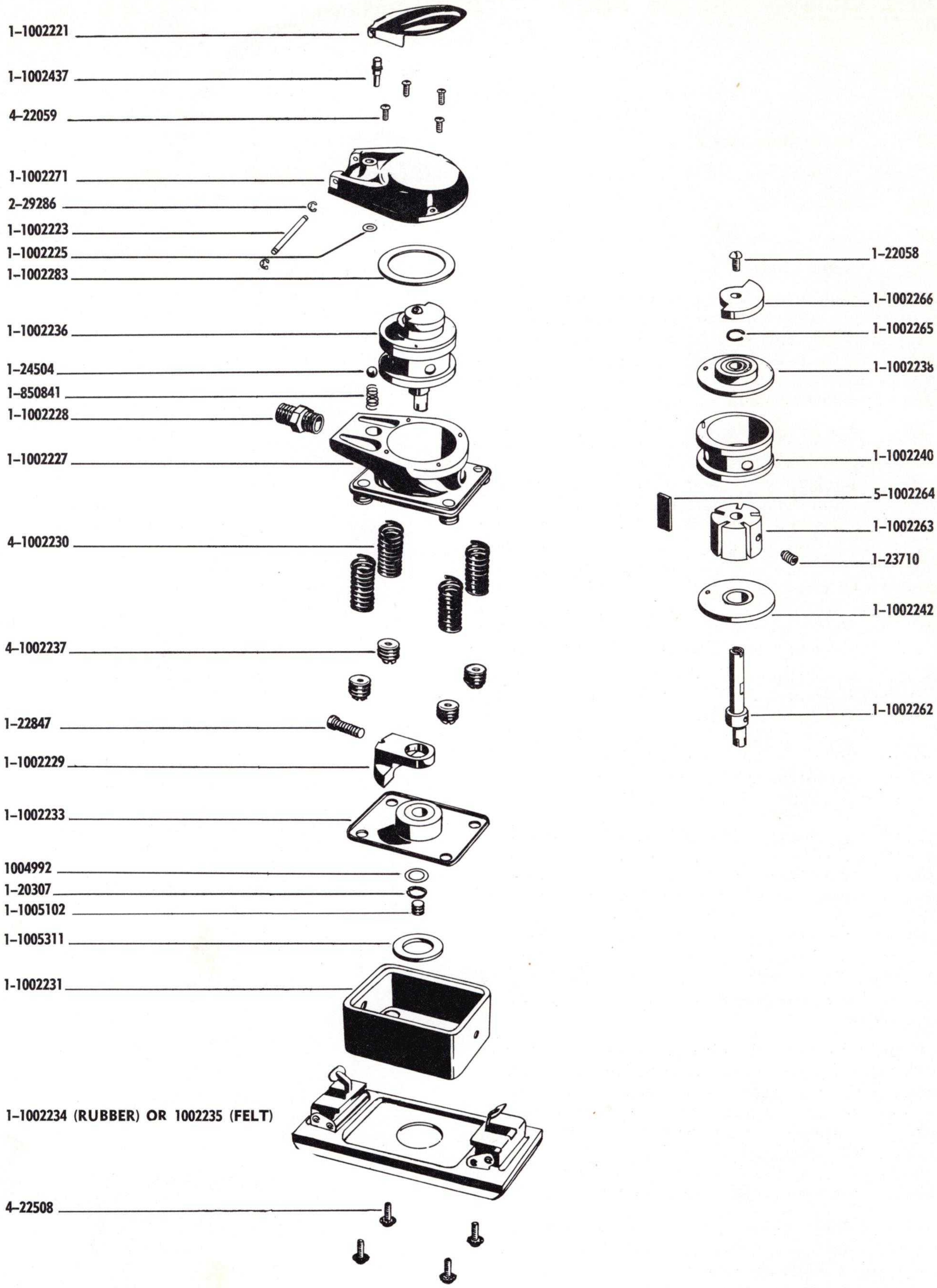


FIG. 8

Remove sander from vise and stretch the dust enclosure upward to allow its lip to fit into the recess provided around the steel flange of the housing assembly.


1-1002221
1-1002437
4-22059
1-1002271
2-29286
1-1002223
1-1002225
1-1002283
1-1002236
1-24504
1-850841
1-1002228
1-1002227
4-1002230
4-1002237
1-22847
1-1002229
1-1002233
1004992
1-20307
1-1005102
1-1005311
1-1002231
1-1002234 (RUBBER) OR 1002235 (FELT)
4-22508
1-22058
1-1002266
1-1002265
1-1002238
1-1002240
5-1002264
1-1002263
1-23710
1-1002242
1-1002262

SUNDSTRAND MAGNETIC-PNEUMATIC PRODUCTS

DIVISION OF SUNDSTRAND MACHINE TOOL CO.

1020 NINTH ST., ROCKFORD, ILLINOIS, U. S. A.

Form No. OS-800-5
Litho in U. S. A.

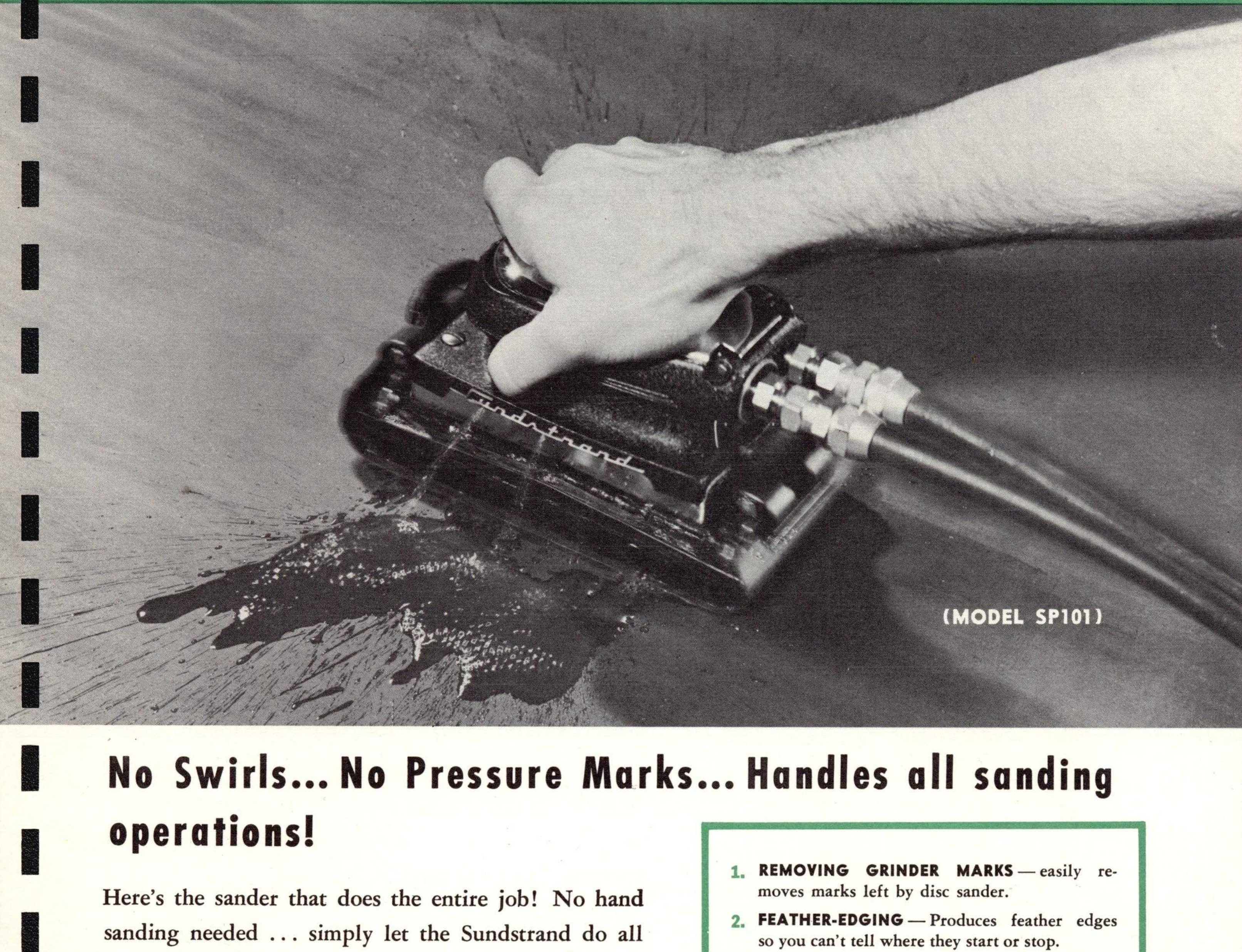
MODEL OS-800 *Single Pad — Orbital Action*

Model OS-800	Description	Number Used Per Machine	Net Price Each
20307	Truarc Retaining Ring	1	$ .06
22058	Screw — Sem. Rd. Hd. 10-24 x ½″	4	.07
22059	Screw — Fil. Hd. 6-32 x ½″	4	.02
22847	Screw — Soc. Hd. Cap 8-32 x 1″	1	.15
23710	Screw — Hex. Soc. Hd. Set 10-32 x ½″	1	.12
24504	Ball 9/32″	1	.04
29286	Truarc Retaining Ring	2	.04
850841	Valve Spring	1	.05
1002221	Lever Actuating	1	.75
1002223	Pin Lever	1	.15
1002225	Seat Valve	1	.03
1002227	Housing Assembly	1	7.00
1002228	Adapter (¼″-¼-18″ Pipe)	1	.55
1002229	Lower Counterweight	1	.50
1002230	Orbiting Spring	4	.10
1002231	Dust Enclosure	1	1.75
1002233	Shoe Assembly	1	7.50
1002234	Pad Assembly Rubber	1	6.50
1002235	Pad Assembly Felt	1	6.50
1002236	Motor Assembly	1	35.00
1002237	Stud-Lower Spring	4	.20
1002238	Inlet Plate Assembly	1	6.00
1002240	Rotor Housing Assembly	1	5.50
1002242	Lower Plate Assembly	1	6.00
1002262	Shaft	1	9.00
1002263	Rotor	1	4.75
1002264	Vane — Rotor	5	.25
1002265	Spring — Bearing Pre Load	1	.03
1002266	Upper Counterweight	1	.25
1002271	Housing — Valve	1	2.00
1002283	Washer Seal	1	.75
1002437	Valve Stem Assembly	1	.50
1004992	Shim Washer	-	.02
1005102	Plug 1/16-36 S.P.T. Taper	1	.15
1005311	Bearing Seal	1	.03

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

Model SP-101

For finer finishes ... use SUNDSTRAND Straight-Line Action Sanders



(MODEL SP101)

No Swirls... No Pressure Marks... Handles all sanding operations!

Here's the sander that does the entire job! No hand sanding needed ... simply let the Sundstrand do all the work ... swiftly, easily! Pad moves back and forth in a perfectly straight line at more than 3,000 oscillations per minute for a smooth, even job. No swirls, no pressure marks! And the compact Sundstrand Air Sander lets you cover all areas ... large as well as small and confining spaces ... to quickly do your complete job by machine!

1. **REMOVING GRINDER MARKS** — easily removes marks left by disc sander.
2. **FEATHER-EDGING** — Produces feather edges so you can't tell where they start or stop.
3. **SCUFFING OLD PAINT** — fast, easy operation —wet or dry.
4. **WET OR DRY SANDING PRIMER COAT** — built-in water attachment ... ideal for wet sanding under coat.
5. **LACQUER COLOR COAT SANDING** — "Orange Peel" quickly removed ... surface ready for compounding.

For fast material removal use a SUNDSTRAND Orbital-Type SANDER!

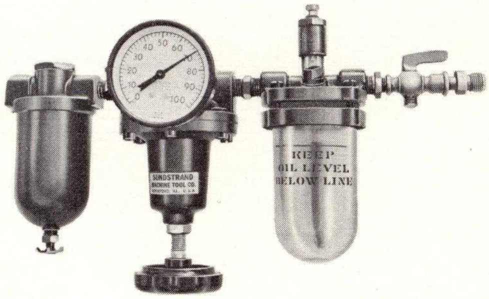
$aves dollars on sanding costs!

- **SMALL AND COMPACT** . . . weighs only 5½ pounds can be guided practically without effort.
- **COUNTER-BALANCED** . . . eliminates fatiguing vibration.
- **STURDY QUICK-ACTION PAD CLIPS** . . . change sandpaper in seconds!
- **BUILT IN WATER ATTACHMENT** . . . lets you sand either wet or dry.
- **ANTI-FRICTION SLIDE BEARINGS** . . . for smoothness, long life.

SPECIFICATIONS

Model No.	Wt. in lbs.	Length of Stroke	No. of Pads	Direction of Pads	Paper Capacity of Clips	Speed	Air Pres. Required	Wet or Dry Sanding
SP-101	5½	3/16″	1	Straight-line	4 to 8 Sheets	over 3,000 oscillations per minute	65 to 100 Pounds	Either or both

For finest performance use Sundstrand accessories



Moisture trap and air cleaner — air pressure regulator — lubricator units — a combination of accessories especially designed to provide the clean, dry air, proper lubrication, and constant air control necessary for consistently fine results with your Sundstrand Air Sanders.

Sundstrand opposed two-pad Air Sander for large area sanding operations

Used by all car manufacturers in producing the original finish on their cars, the Sundstrand Model 1000 is an excellent portable sander for use in your complete body refinishing operations. It is equally suitable for wet or dry sanding . . . operates with straight-line action . . . and eliminates vibration and operator fatigue through the opposed action of two oscillating pads.

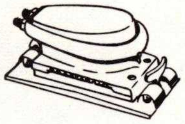
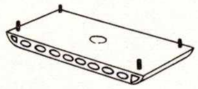
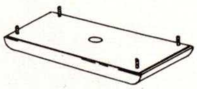
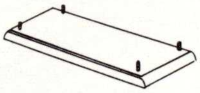
SUNDSTRAND

**SUNDSTRAND
AIR SANDERS**

SUNDSTRAND MACHINE TOOL CO.
PNEUMATIC DIVISION, ROCKFORD, ILLINOIS

Litho in USA

MODEL SP-101 *Single Pad—Wet or Dry—Straight Line Action*

*SP-101-W		Single-Pad Air Sander machine only, less pad	$83.00
*SP-101-W		Single-Pad Air Sander with SR-101 Tubular Rubber Pad (SR-101 Pad only: $5.00)	$88.00
*SP-101-W		Single-Pad Air Sander with either of the following Felt Pads	$86.75
		(SF-105 Felt Pad only: $3.75)	
		(SF-107 Felt Pad only: $3.75)	

*Note: Hose connections on Sander may be had with either ¼-18 pipe thread (RM-1097 Adapter), or 9/16-20 thread (RM-1096 Adapter).

Abrasive Sheet Size for the Above Pads — 3⅔″ x 9″.

¼" LUBRICATOR AND AIR CONTROL UNIT

(One for each sander)

COMPLETE — Filter, Regulator, Gauge and Oiler — 1001925	$31.20

Oiler only (10407)	$12.00	COMBINATION	
Filter only (10409)	9.00		
Regulator only (10410)	8.45	Oiler-Filter (10412)	$21.00
Gauge only (10411)	1.75	Regulator-Gauge (1001924)	$10.20

HOSE

(Two lengths for "Wet" Sanding — one for "Dry")

*15 Ft.	URM-1112	¼″ air or water hose, with couplings	$ 4.95
*25 Ft.	URM-1111	¼″ air or water hose, with couplings	$ 6.95
*50 Ft.	C-4147	¼″ air or water hose, with couplings	$11.95

*Couplings on hose may be had with either ¼-18 pipe thread (C-3876 Couplings), or 9/16-20 thread (C-3804 Couplings).

COUPLINGS only, ¼-18 p.t. (C-3876), or 9/16-20 (C-3804)	.75 ea.
ADAPTER — 851577 — for connecting hose coupling to water supply. Female end connects to ¾″ hose pipe thread; male end accommodates ¼-18 coupling on hose	$ 1.25

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL. SUNDSTRAND
A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

Operating and Service Information for
SUNDSTRAND SINGLE PAD WET AND DRY SANDERS

The Sundstrand pneumatic single pad sander operates at the high speed of 3000 to 3500 oscillations per minute to produce fine finishes in the shortest possible time and with the least operator effort. The single pad sander is especially useful in confined areas such as the inside of cavity molds and dies, and the inside of desks and furniture drawers where other sanders will not operate.

It is made of carefully selected materials and fine workmanship. When properly installed with a moisture trap or air cleaner, pressure regulator, and an automatic lubricator and treated with the reasonable care outlined in this folder, the Sundstrand sander will give long and trouble-free service.

The instructions given apply to both wet and dry models. Part numbers as charted on back page apply to all models unless otherwise indicated.

CORRECT ARRANGEMENT OF UNITS

The ideal arrangement for a Sundstrand sander installation has a moisture trap and air cleaner, pressure regulator, and an automatic lubricator in the order shown in figure 1. Use SUNDSTRAND OIL RESISTANT HOSE for air line and SUNDSTRAND ALKALI RESISTANT HOSE for water line.

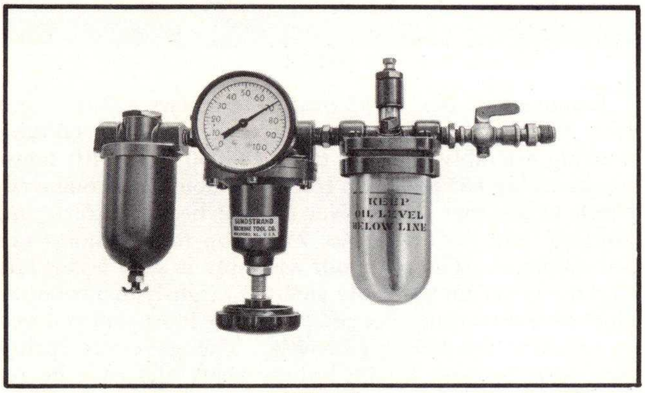


FIG. 1

MOISTURE TRAP AND AIR CLEANER

Clean dry air is essential to satisfactory operation of any air tool. With a moisture trap and air cleaner, lint, scale, and any other impurities as well as moisture in the air can be trapped before reaching the machine. The moisture trap should be cleaned frequently.

AIR PRESSURE REGULATION AND CONSUMPTION

The Sundstrand sander includes a governor which will maintain a constant reciprocation speed of the pads independent of variations of force applied to sander. The sander operates most efficiently when the air pressure at the regulator is maintained at seventy pounds. With this pressure these machines may be expected to use approximately 10 cubic feet of air per minute per machine. This figure will vary slightly from machine to machine due to manufacturing tolerances, however 10 cubic feet is a good average figure.

LUBRICATION

If the machine stands idle for any period of time, before starting pour approximately 5 to 10 drops of oil in the air line. Connect air line and run machine away from the work until excess oil has been blown out. The life of the machine is dependent upon PROPER LUBRICATION and care. For best results a Sundstrand Automatic Lubricator is recommended. This is a fog type lubricator which provides the correct amount of lubrication in the most useful form. The air passing through the lubricator atomizes the drops of oil into a fine mist which provides complete lubrication. Only 10% of the oil that drips through the sight glass is atomized and carried into the machine. Thus, the large oil particles return to the bowl and only small particles go into the air system. The automatic lubricator can be set to provide the amount of oil necessary for best operating results of the machine, and avoid excessive lubrication which might run out of the machine and reach the work. It should be noted that SUNDSTRAND PNEUMATIC MACHINE LUBRICANT is RECOMMENDED for use with the sander and both it and the assembly shown in figure 1 are available at Sundstrand Machine Tool Co., Rockford, Illinois. Operation of the lubricator is automatic. Only requirements are to fill the reservoir with the above lubricant, adjust the needle valve for distribution of oil at the rate of 3 drops per minute per machine.

OPERATION

The operation of the machine is very simple with speed of pad movement being controlled by a rotating fly ball governor located within the machine housing. A slight pressure by the palm of the hand when gripping the machine housing opens the air valve and starts pad reciprocation.

In the wet sander the pressure of the palm of the hand also open the water valve allowing the water to flow through the water tube assembly. The water sprays out of the assembly clearing the sides of the shoe and falling on the work. In this way water does not get into the sander body proper.

HOW TO CHANGE PAPER

The spring clips of the sander will hold up to eight sheets of abrasive paper depending upon the coarseness of the grit.

Using 4 to 8 sheets of paper depending on size and grit, clip one end of the paper and stretch it snugly over the pad as shown in figure 2, then clip other ends.

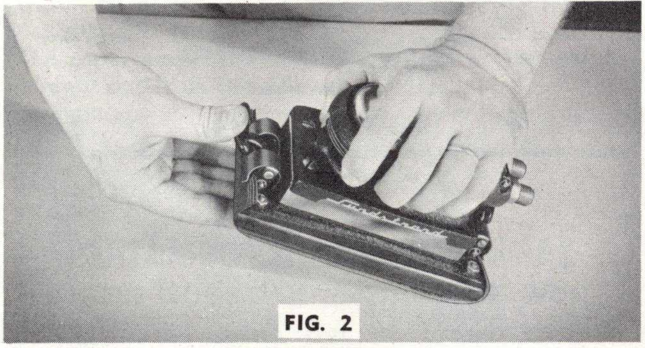


FIG. 2

HOW TO CHANGE PADS

Referring to figure 3 remove abrasive paper from spring clips, loosen the four nuts on each corner of the shoe, and lift off the pad. Spin Tite socket wrenches for performing this operation may be procured from Sundstrand Machine Tool Co.

SUNDSTRAND MACHINE TOOL CO.
PNEUMATIC DIVISION
2531 ELEVENTH ST., ROCKFORD, ILLINOIS, U. S. A.

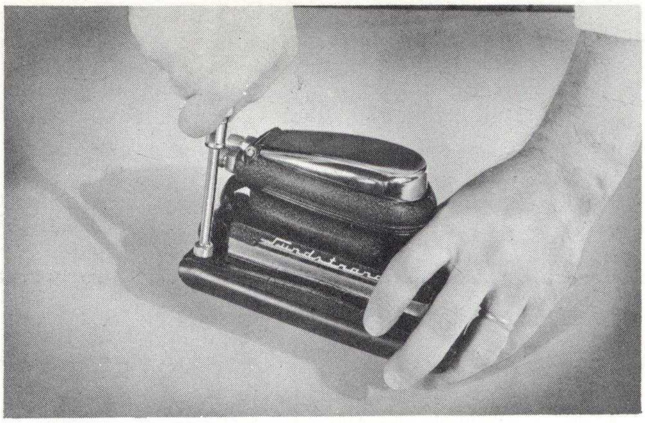


FIG. 3

NOTE: When replacing pad on shoe make sure the four nuts are tight and lock washers are in place. This is VERY IMPORTANT as the four nuts on the *pad bolts must* be kept tight to prevent wearing of bolt threads and elongation of shoe holes.

TOOLS REQUIRED FOR SERVICE

Due to the simplified design of this high performance machine, a minimum of tools are required to service it. See figure 4. The few simple ones needed are listed below:

1. 4″ standard screw driver.
2. 3/8″ Spin Tite socket wrench or open end wrench
3. 3/32″ diameter brass or drill rod
4. 6″ long nosed pliers
5. 1 pair No. 2 Waldes Kohinoor Truarc external pliers (Long Island 1, N.Y.)

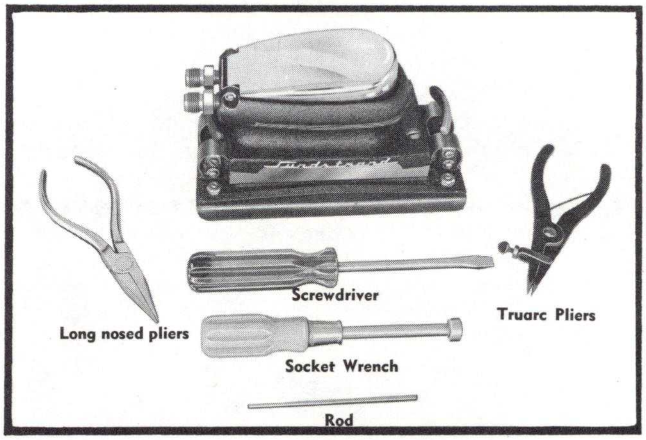


FIG. 4

SANDER SERVICE INFORMATION

HOW TO CHANGE GOVERNOR SPRING

Remove one of the two Truarc Retaining Rings (29286) assembled on cover pin (850161) as shown in figure 5. This can be accomplished with a pair of 6″ long nosed pliers since this is a snap type ring. Using a 3/32″ dia. drill rod or brass rod as a drift pin, push cover pin (850161) out of housing assembly (850738) and actuating cover (850013). The Actuating Cover may now be lifted off the housing assembly by pressing on the cover pin end of the cover as shown in figure 6 and pushing the cover forward.

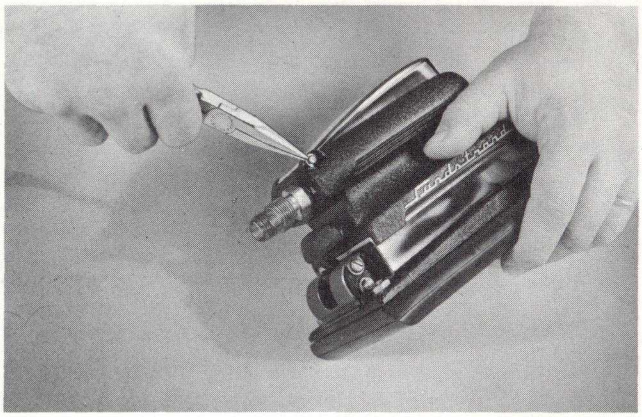


FIG. 5

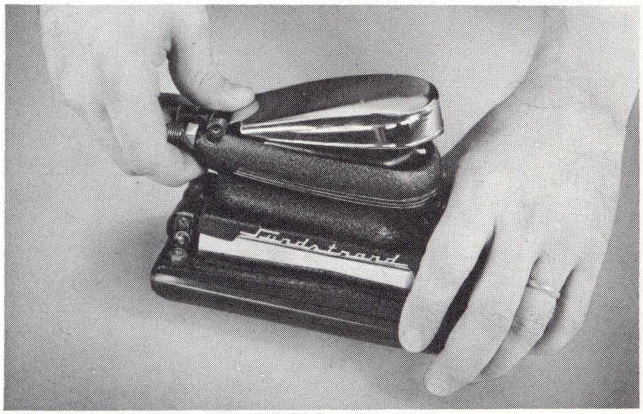


FIG. 6

Remove two No. 10-32 oval head screws (22015) and two No. 10-32 fillister head screws (23909) holding housing assembly to roller track (850003) and lift housing assembly (850738) off track. As housing is removed, check to see that gasket No. 850462 between track and housing, and "O" ring No. 25872 on top of motor are not damaged. The governor assembly is now accessible. Tap the governor assembly (850437) lightly in a counterclockwise direction (figure 7) to jar it loose and proceed to unscrew the whole assembly. The governor spring may now be seen in the hollow shaft and may be removed by turning the roller track assembly upside down.

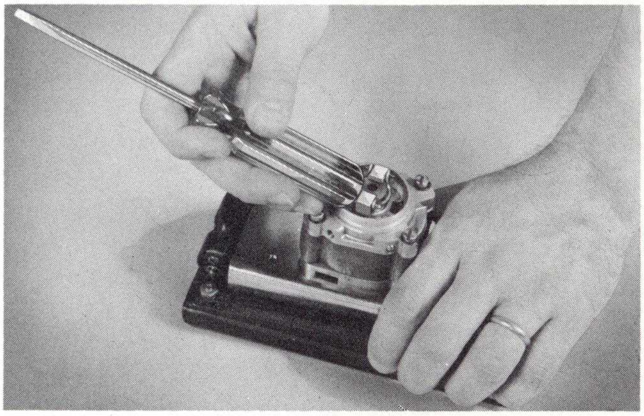


FIG. 7

Replace spring and reverse above procedure in reassembly.

CAUTION: Grease "O" ring No. 25872 and place in housing (not on the motor) before re-assembly and be certain gasket No. 850462 is correctly aligned.

DISASSEMBLY OF VANE MOTOR

To disassemble vane motor assembly follow procedure outlined for changing the governor springs. When this has been completed, remove the four nuts located on the corners of the shoe and lift off the pad. (Same procedure as when changing pads.) With the pad off and the machine turned upside down, the four No. 8-32 x 3/8" flat head screws holding the cover plate No. 850032 are now easily accessible for removal. With these screws out, the cover plate may be lifted off and the Truarc snap ring No. 29265 and the lower shaft washer No. 850071 may be removed from the end of the crankshaft (figure 8) by the use of a No. 2 Truarc external pliers (Waldes Kohinoor, Long Island 1, New York). The machine may now be turned right side up and the four fillister head screws No. 23909 holding the motor assembly to the roller track may be removed. The entire motor assembly is now free and may easily be lifted out of the machine by pulling on the exhaust port plate assembly figure 9).

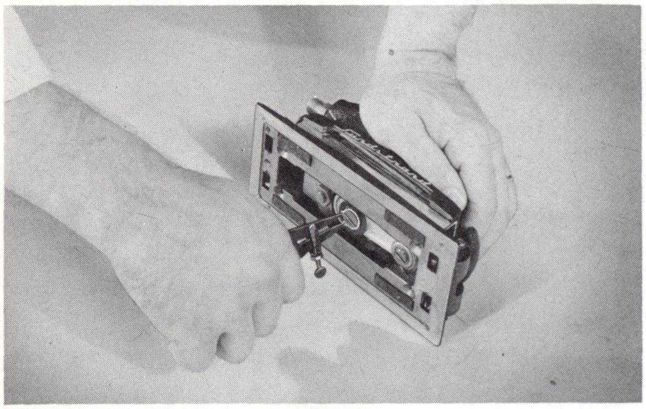


FIG. 8

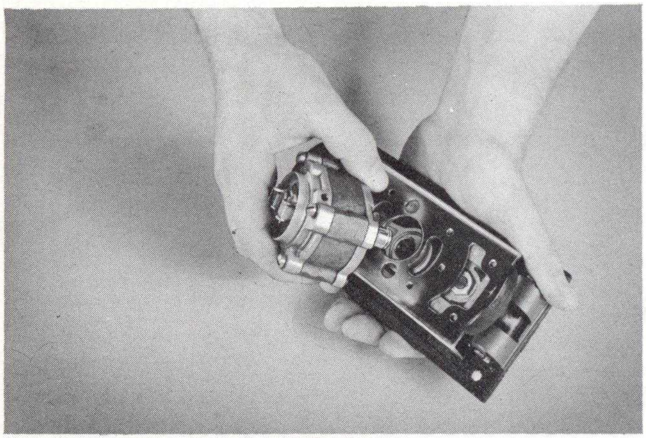


FIG. 9

With the motor assembly out of the machine the inlet port plate assembly No. 850547 may be removed by lifting it off the crankshaft No. 850372. With the inlet port plate assembly removed, the Truarc retaining ring No. 29265 and the upper shaft washer No. 850061 are accessible and may be removed (figure 10) with Waldes Kohinoor Truarc No. 2 pliers. Next the rotor housing may be lifted off the rotor.

CAUTION: The rotor and rotor housing, termed rotor housing assembly, are a matched assembly and must be replaced in sets.

All of the vanes No. 850191 may now be taken out of the rotor. The exhaust port plate assembly should now be slipped off the lower end of the crankshaft first making certain the Woodruff key No. 24701 in the lower end of the shaft has been removed. The shaft may next be gently tapped upward through the rotor being careful that "O" ring No. 25870 comes out with shaft and is not damaged as Woodruff key is forced out of the keyway.

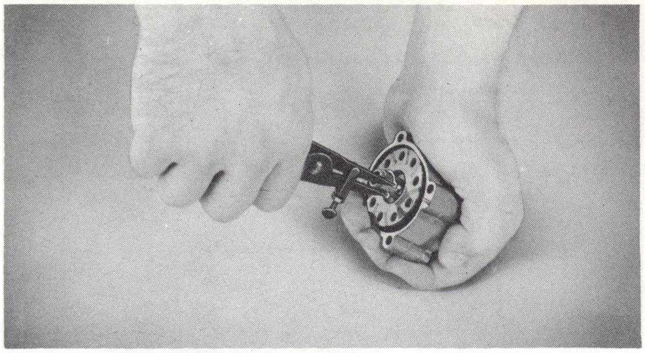


FIG. 10

To reassemble reverse above procedure with the exception that the "O" ring No. 25870 should be greased and seated well down into the rotor. Care should also be taken to see that dowel pins No. 25632 on inlet and exhaust port plate assemblies are correctly aligned during assembly and that needle bearings in these assemblies are packed in grease.

Either or both port assemblies may be rotated 180° without interfering with operation of the machine, but inlet and exhaust port plates are not interchangeable.

TO CHANGE CONNECTING RODS OR TRACK ROLLER ASSEMBLIES

Remove housing and motor assembly as described in the preceding pages for disassembly of motor. It is not necessary to completely disassemble the motor but the drive shaft and motor must be removed from the roller track.

To remove the roller track it is necessary to remove the clip pin No. 850411 on one of the paper holding clips.

CAUTION: Before starting disassembly be sure the clip is in the open position so the tension on the clip spring is relieved.

Removing the clip pin is accomplished by removing one of the Truarc retaining rings No. 29287 on one end of the clip pin with a pair of 6" long nosed pliers and pushing the clip pin out the opposite end with a 3/32" diameter drill rod or brass rod (figure 11). With the clip pin removed, the spring will drop a sufficient amount to allow the roller track to slide off exposing the roller assembly No. 850256 and the connecting rod assemblies. The roller assemblies may be removed by pulling them straight out from the sides of the shoe.

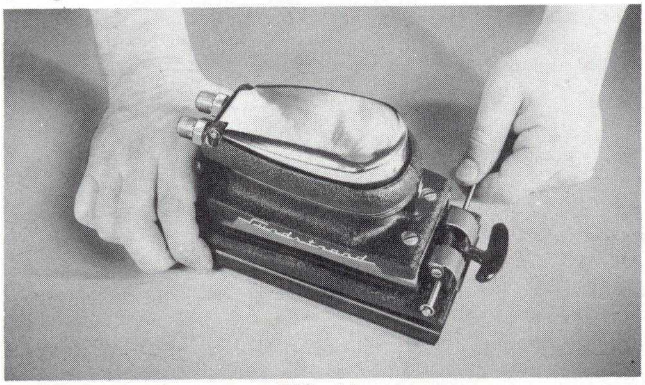
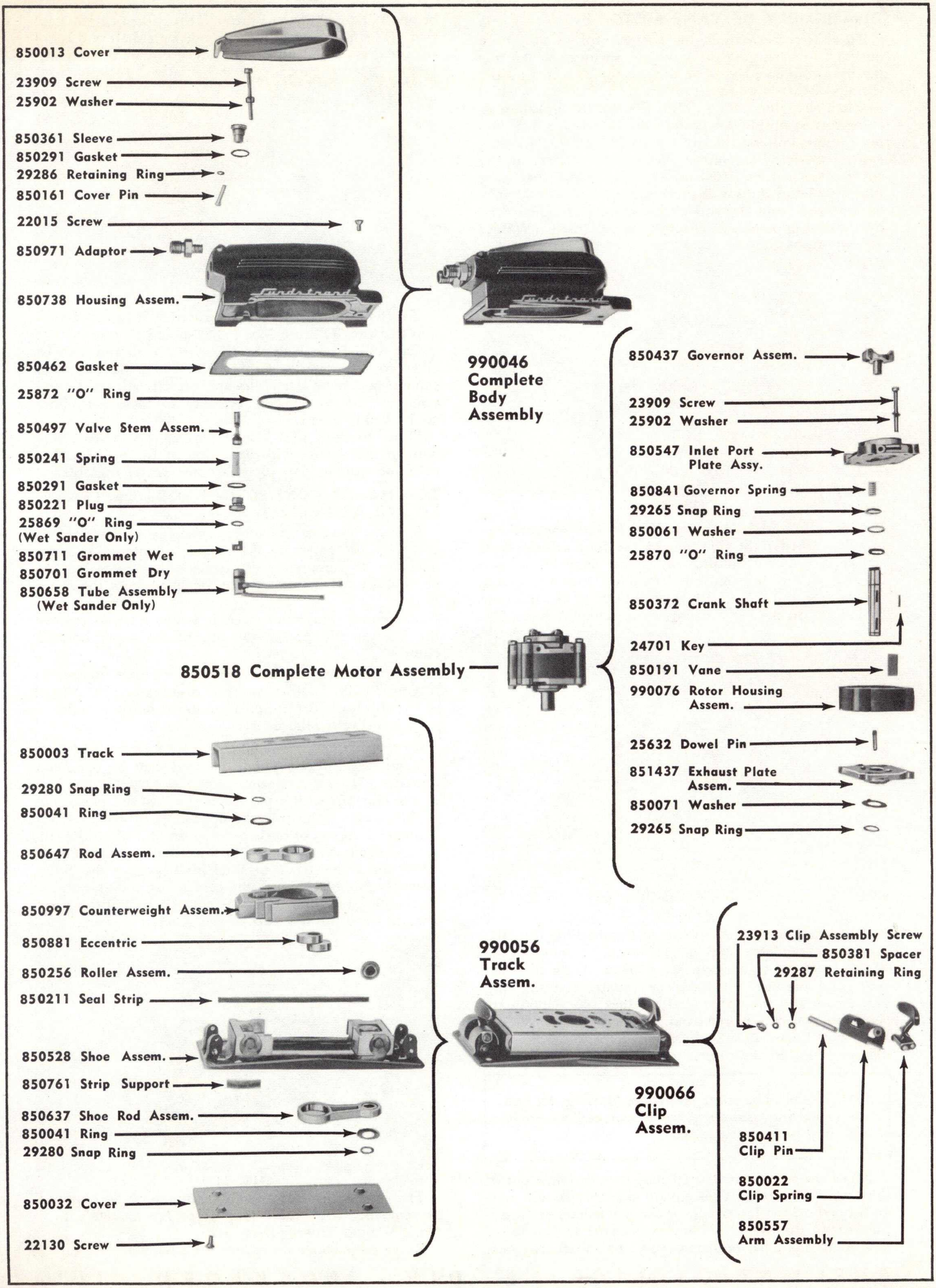


FIG. 11

The connecting rod assemblies may now be removed by removing the Truarc snap rings No. 29280 with a No. 2 Waldes Truarc pliers.

Reverse the above procedure for assembly.


850013 Cover
23909 Screw
25902 Washer
850361 Sleeve
850291 Gasket
29286 Retaining Ring
850161 Cover Pin
22015 Screw
850971 Adaptor
850738 Housing Assem.
850462 Gasket
25872 "O" Ring
850497 Valve Stem Assem.
850241 Spring
850291 Gasket
850221 Plug
25869 "O" Ring (Wet Sander Only)
850711 Grommet Wet
850701 Grommet Dry
850658 Tube Assembly (Wet Sander Only)
990046 Complete Body Assembly
850437 Governor Assem.
23909 Screw
25902 Washer
850547 Inlet Port Plate Assy.
850841 Governor Spring
29265 Snap Ring
850061 Washer
25870 "O" Ring
850372 Crank Shaft
24701 Key
850191 Vane
990076 Rotor Housing Assem.
25632 Dowel Pin
851437 Exhaust Plate Assem.
850071 Washer
29265 Snap Ring
850518 Complete Motor Assembly
850003 Track
29280 Snap Ring
850041 Ring
850647 Rod Assem.
850997 Counterweight Assem.
850881 Eccentric
850256 Roller Assem.
850211 Seal Strip
850528 Shoe Assem.
850761 Strip Support
850637 Shoe Rod Assem.
850041 Ring
29280 Snap Ring
850032 Cover
22130 Screw
990056 Track Assem.
23913 Clip Assembly Screw
850381 Spacer
29287 Retaining Ring
990066 Clip Assem.
850411 Clip Pin
850022 Clip Spring
850557 Arm Assembly

MODEL SP-101 *Single Pad—Wet or Dry—Straight Line Action*

Model SP-101-W (Wet or Dry)	Description	Number Used Per Machine "W"	Net Price Each
22015	Screw	2	.01
22130	Screw	4	.01
23909	Screw	6	.02
23913	Clip Assembly Screw	4	.01
24701	Key	2	.02
24830	1/8-27 Aluminum Pipe Plug	—	.15
25582	Governor Pin	2	.05
25632	Dowel Pin	4	.03
25869	O-Ring	1	.15
25870	O-Ring	1	.15
25872	O-Ring	1	.30
25902	Washer	6	.01
29265	Snap Ring	2	.05
29280	Snap Ring	2	.05
29286	Retaining Ring	2	.04
29287	Retaining Ring	4	.04
850003	Track	1	2.75
850013	Actuating Cover	1	1.00
850022	Clip Spring	2	.40
850032	Cover	1	.20
850041	Ring	2	.02
850061	Washer	1	.06
850071	Washer	1	.06
850151	Governor Weight	2	.85
850161	Cover Pin	1	.15
850191	Vane	9	.25
850211	Seal Strip	2	.03
850221	Plug	1	.35
850231	Governor Sleeve	1	.55
850241	Spring	2	.25
850256	Roller Assembly	4	.85
850291	Gasket	3	.03
850361	Sleeve	2	.25
850372	Crank Shaft	1	5.25
850381	Clip Pivot Spacer	4	.03
850411	Clip Pin	2	.08
850422	Governor Weight Spider	1	.65
850437	Governor Assembly	1	3.70
850462	Gasket	1	.05
850497	Valve Stem Assembly	2	.30
850518	Complete Motor Assembly	1	40.00
850528	Shoe Assembly	1	6.75
850547	Inlet Port Plate Assembly	1	3.50
850557	Arm Assembly	2	1.35
850637	Shoe Rod Assembly	1	3.35
850647	Rod Assembly	1	2.75
850658	Tube Assembly	1	1.95
850681	Name Plate	1	.10
850701	Grommet	—	.10
850711	Grommet	2	.10
850738	Housing Assembly	1	6.85
850761	Strip Support	4	.02
850841	Governor Spring	1	.05
850881	Eccentric	1	4.75
850997	Counterweight Assembly	1	7.00
851437	Exhaust Plate Assembly	1	4.75
990066	Clip Assembly	2	1.69
990076	Rotor and Housing Assembly (Supplied together—includes Rotor and Rotor Housing, less Vanes)	1	16.80
RM1096	(9/16″ x 20″) Adapter	2	.35
RM1097	(¼″ x ⅛″) Adapter	2	.35

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.

A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

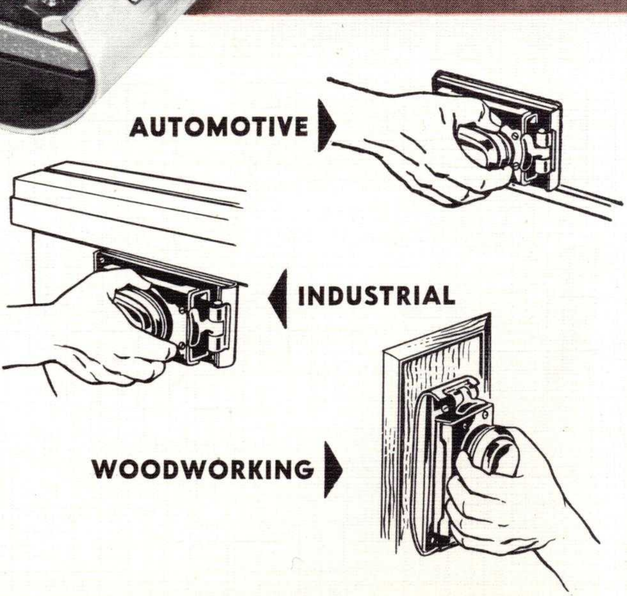
Model OS-700

remove material faster with SUNDSTRAND Orbital Air Sander

Sundstrand

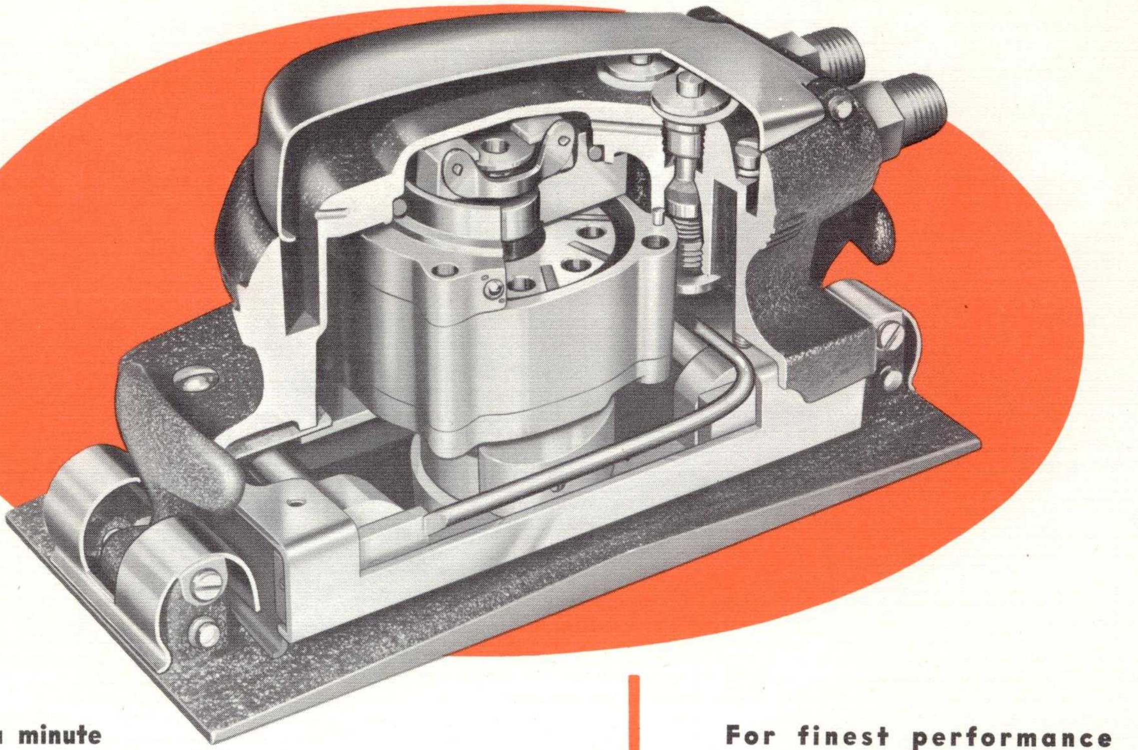
Low air consumption ... equipped for wet or dry sanding operations!

- Here is a new, fast performing, smooth operating, orbital type air sander that fits snugly into the palm of your hand. Unique pad control permits sanding up to edges and molding . . . completely eliminating hand sanding. Pad has true orbital action . . . minimizing scratch marks. Although the pad operates at speeds to 6000 cycles a minute, the improved design, precision all metal construction, and counter balanced action eliminates vibration and reduces fatigue. Complete specifications on back page.



SUNDSTRAND SANDER ALSO AVAILABLE WITH STRAIGHT-LINE ACTION.

$aves dollars on sanding costs!

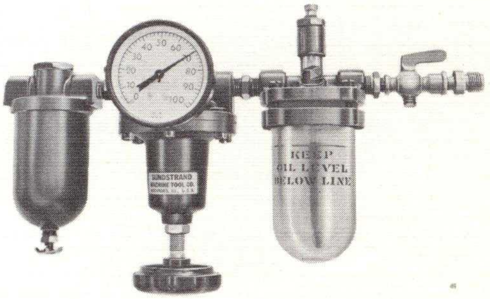


- 6000 cycles a minute
- Counter-balanced pad for smoother operation
- Sturdy, quick-change pad clips
- Small, compact unit — easy to use on small or large areas
- Palm Lever controls both air and water
- Built-in water attachment
- Anti-friction bearings for long life
- Low air consumption — 6 to 9 C.F. per minute

SPECIFICATIONS

Model No.	Wt. in lbs.	Circular Action	No. of Pads	Direction of Pads	Paper Capacity of Clips	Speed	Air Pres. Required	Wet or Dry Sanding
OS-700	4½	3/16″	1	Orbital	4 to 8 Sheets	6000 cycles per minute	50 to 75 pounds	Either or both

For finest performance use Sundstrand accessories



Moisture trap and air cleaner — air pressure regulator — lubricator units — a combination of accessories especially designed to provide the clean, dry air, proper lubrication, and constant air control necessary for consistently fine results with your Sundstrand Air Sanders.

SUNDSTRAND

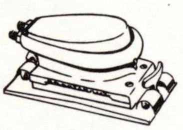
SUNDSTRAND
AIR SANDERS

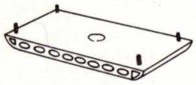
SUNDSTRAND MAGNETIC-PNEUMATIC PRODUCTS
DIVISION OF SUNDSTRAND MACHINE TOOL CO.
ROCKFORD, ILLINOIS, U.S.A.

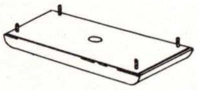
Form No. 2111

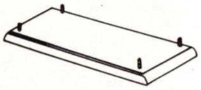
Litho in U.S.A.

MODEL OS-700 *Single Pad—Wet or Dry—Orbital Action*









*OS-700	Single-Pad Air Sander machine only, less pad	$83.00
*OS-700	Single-Pad Air Sander with SR-101 Tubular Rubber Pad (SR-101 Pad only: $5.00)	$88.00
*OS-700	Single-Pad Air Sander with either of the following Felt Pads (SF-105 Felt Pad only: $3.75) (SF-107 Felt Pad only: $3.75)	$86.75

*Note: Hose connections on Sander may be had with either 1/4-18 pipe thread (RM-1097 Adapter), or 9/16-20 thread (RM-1096 Adapter).

Abrasive Sheet Size for the Above Pads — 3 2/3" x 9"

1/4" LUBRICATOR AND AIR CONTROL UNIT

(One for each sander)

COMPLETE — Filter, Regulator, Gauge and Oiler — 1001925	$31.20

Oiler only (10407)	$12.00	COMBINATION	
Filter only (10409)	9.00		
Regulator only (10410)	8.45	Oiler-Filter (10412)	$21.00
Gauge only (10411)	1.75	Regulator-Gauge (1001924)	$10.20

HOSE

(Two lengths for "Wet" Sanding — one for "Dry")

*15 Ft.	URM-1112	1/4" air or water hose, with couplings	$ 4.95
*25 Ft.	URM-1111	1/4" air or water hose, with couplings	$ 6.95
*50 Ft.	C-4147	1/4" air or water hose, with couplings	$11.95

*Couplings on hose may be had with either 1/4-18 pipe thread (C-3876 Couplings), or 9/16-20 thread (C-3804 Couplings).

COUPLINGS only, 1/4-18 p.t. (C-3876), or 9/16-20 (C-3804)	.75 ea.
ADAPTER — 851577 — for connecting hose coupling to water supply. Female end connects to 3/4" hose pipe thread; male end accommodates 1/4-18 coupling on hose	$ 1.25

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.
A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

Operating and Service Information for
SUNDSTRAND OS 700 ORBITAL AIR SANDER

SPECIFICATIONS

Air Consumption: 6 to 9 CFM depending on load.
Diameter of Orbit: 3/16″.
Speed: Up to 5700 cycles per minute.
Paper Capacity of Clips: 4 to 8 sheets.
Air Pressure: 65 to 90 pounds.

The Sundstrand Orbital Sander is a quality product produced to exacting standards to give long and trouble free service when installed as recommended and given reasonable care.

CORRECT AUXILIARY EQUIPMENT

It is recommended that the Sundstrand Orbital machine be installed with a moisture trap and air cleaner, pressure regulator, and automatic lubricator arranged as shown in figure 1. USE SUNDSTRAND OIL RESISTANT HOSE for air line and SUNDSTRAND ALKALI RESISTANT HOSE for water line.

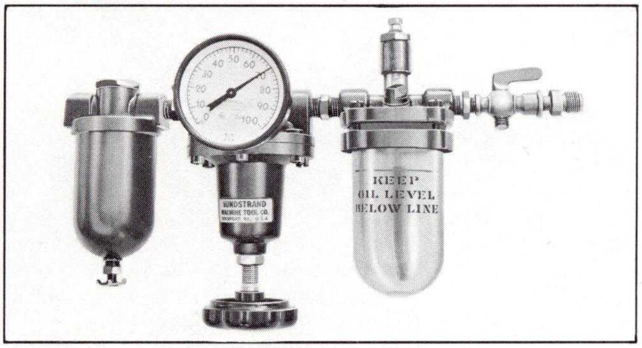


FIG. 1

MOISTURE TRAP AND AIR CLEANER

Clean dry air is essential to satisfactory operation of any air tool. With a moisture trap and air cleaner, the lint, scale, and other impurities as well as moisture in the air can be removed before reaching the machine. The moisture trap should be cleaned frequently.

LUBRICATION

Either a fog type or drip type lubricator can be used with this machine. See tabulation below for setting rate of oil flow for each type lubricator.

Fog Type Lubricator—10 drops per minute through sight glass.

Drip Type Lubricator—1 drop per two minutes through sight glass.

For applications where oil can not be tolerated in the air lines because of paint spray equipment, etc. manual lubrication is permissable. It is essential, when manual method of lubricating is used, to introduce 5 to 10 drops of oil into the machine every hour during the first 50 hours of operation. After the machine has passed this initial run in period, less lubricant may be used. The stated amount of oil for manual lubrication is less than normally supplied by an automatic lubricator, therefore, during the break in period, a lack of power may be evident, as a result of friction. In case this condition occurs, increase the frequency of lubricating the machine during the normal run in period.

SUNDSTRAND PNEUMATIC MACHINE LUBRICANT IS RECOMMENDED for use with this sander. Both the lubricant and the assembly shown in figure 1 are available from SUNDSTRAND MAGNETIC PRODUCTS COMPANY, ROCKFORD, ILLINOIS. In the event the recommended lubricant is not used, substitute a good grade of non detergent lubricating oil not heavier than SAE 10.

HOW TO CHANGE PAPER

The spring clips of the sander will hold four to eight sheets of abrasive paper depending upon the coarseness of the grit. Fasten one end of the abrasive sheets under one clip, then stretch the paper snugly over the pad, and attach it in place by means of the clip at the opposite end.

HOW TO CHANGE PADS

Remove abrasive paper from spring clips, loosen the four nuts, one at each corner of the shoe, and lift off the pad. Spin Tite socket wrenches for performing this operation may be procured from SUNDSTRAND MAGNETIC PRODUCTS COMPANY.

> NOTE: When replacing pad on shoe, make sure the four nuts are tight and lock washers are in place. This is VERY IMPORTANT as the four nuts on the pad bolts must be kept tight to prevent wearing of screw threads and elongation of holes in the shoe.
>
> NOTE: Pads for this machine are listed on price sheet. This machine is balanced for these pads only. DO NOT ATTEMPT TO USE OTHER PADS.

TOOLS REQUIRED FOR SERVICE

The Orbital Sander is designed to provide ease of maintenance and may be serviced with a minimum of tools. The tools required are shown in figure 2.

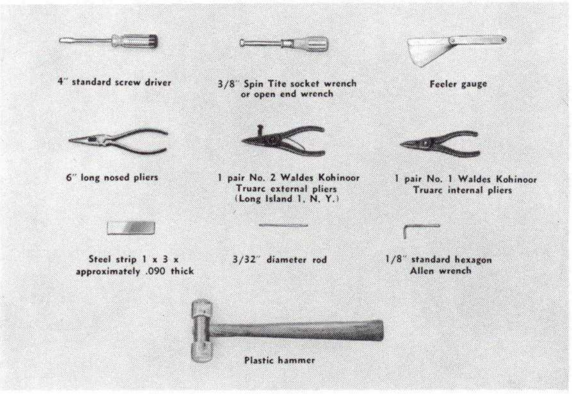

4″ standard screw driver
3/8″ Spin Tite socket wrench or open end wrench
Feeler gauge
6″ long nosed pliers
1 pair No. 2 Waldes Kohinoor Truarc external pliers (Long Island 1, N. Y.)
1 pair No. 1 Waldes Kohinoor Truarc internal pliers
Steel strip 1 x 3 x approximately .090 thick
3/32″ diameter rod
1/8″ standard hexagon Allen wrench
Plastic hammer

FIG. 2

SANDER SERVICE INFORMATION (DISASSEMBLY OF MACHINE)

The first step in the disassembly of this unit is to remove the pad. Next remove one of the two Truarc retaining rings (29286) assembled on cover pin (850161). Use a 3/32″ diameter rod as a drift pin; push cover pin out of housing assembly (1000878) and actuating cover (850013). Lift the actuating cover off the housing assembly. Remove two No. 10-32 oval head screws (22866) and two No. 10-32 fillister head screws (23985) holding housing assembly, then lift housing assembly off the track assembly (1000677). The governor and counter-weight assembly (1000327) is now accessible. Remove the governor sleeve (1000342) by placing the sharpened end of a pencil into hole in governor sleeve, depress and turn 90 degrees. Remove the pencil and the governor sleeve will be pushed upward by the governor spring (1000741) clearing the governor weights. Remove the governor sleeve and the governor spring. Remove the governor and counter-weight assembly by removing the Truarc ring (29458), figure 3, using No. 2 Truarc external pliers.

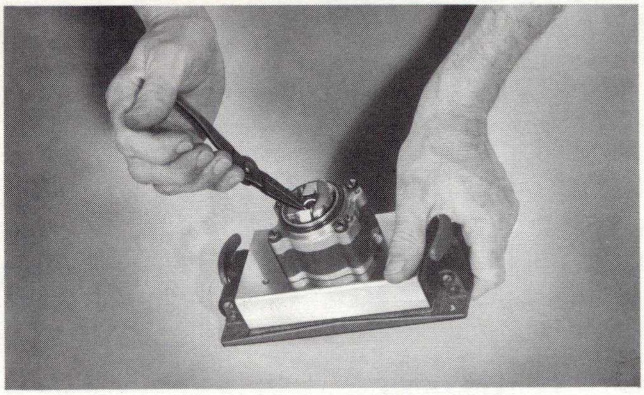


FIG. 3

With the bottom of the machine in an upward position remove the bearing seal (1005311) using a pair of pliers. Next remove the Truarc bowed retaining ring (20307) and shim washer (1004992) from extended end of motor shaft. Clamp a piece of 1″ wide by .090 thick steel in a vise positioned to extend above the jaws. Place the slot at the governor end of the drive shaft (1000283) over the upright steel strip. With the machine positioned as shown in figure 4 and using a 1/8″ hexagon Allen wrench remove the taper plug (1005102) from the end of the shaft extending thru the bearing.

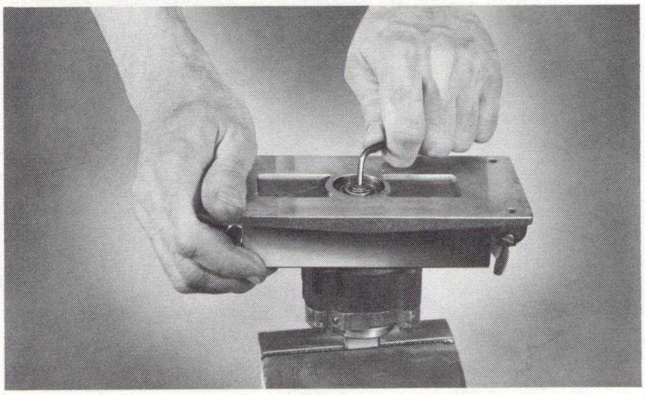


FIG. 4

Now pull the motor assembly (1000357) and track assembly (1000677) away from the shoe assembly (1000658), figure 5. Care should be exercised in this disassembly as the gib axles are spring loaded and retained inside the track assembly.

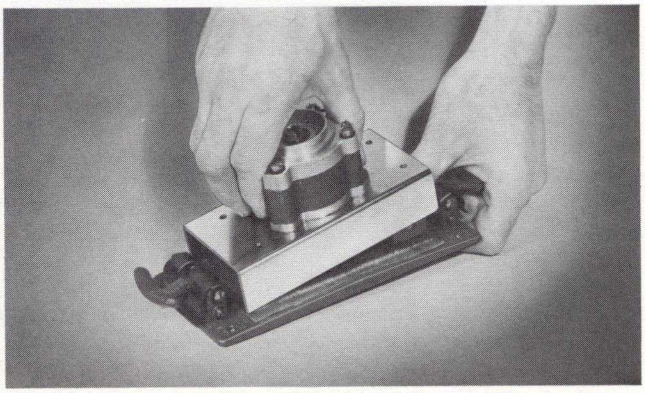


FIG. 5

To remove the motor assembly (1000357) from the track assembly (1000677), remove the lower counterweight (1000272) using a 1/8″ hexagon Allen wrench. Remove the four large screws (23909) at the top of the motor assembly leaving the two small screws (23986) in place to retain the motor as a complete unit.

REMOVAL OF PAPER CLIPS

If it is found necessary to remove the clip arm assembly (1000867) or the clip spring (1000833) from the shoe assembly (1000658), first, relieve the spring tension by opening the clip. Remove one of the two Truarc retaining rings (29287) assembled on clip pin (850411). Use a 3/32″ diameter rod as a drift pin, push clip pin out of shoe assembly and clip arm assembly as shown in figure 6. Remove the two screws (23913) retaining spring clip to shoe.

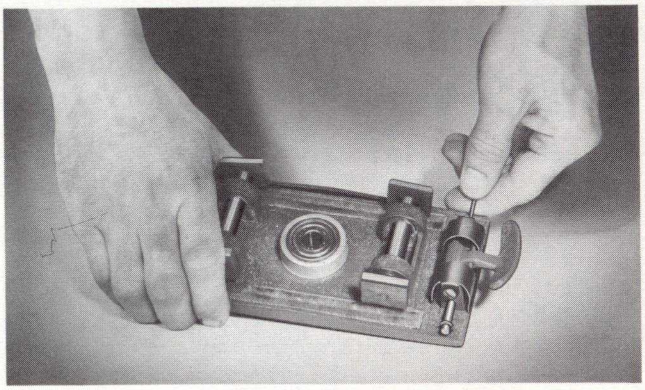


FIG. 6

DISASSEMBLY OF AIR MOTOR

Remove the two small screws (23986) on top of the motor assembly. The inlet port plate assembly (1000337) may now be lifted off the drive shaft (1000283). Next, the rotor housing (1000243) may be lifted off the exhaust port plate assembly (1000238). The 5 vanes (1000202) may now be removed from the rotor. To remove the rotor from the shaft and port plate assembly, hold the rotor as shown in figure 7 and gently tap the shaft end with a plastic hammer.

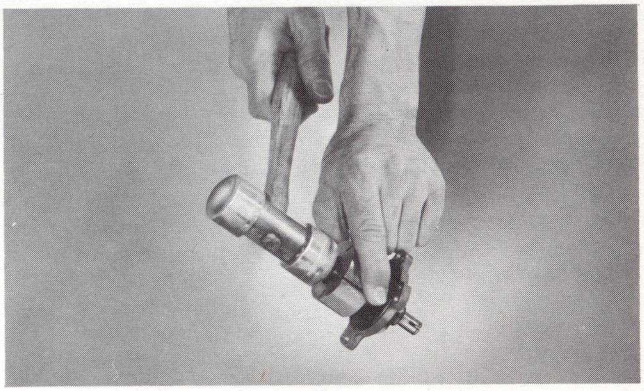


FIG. 7

CAUTION: The rotor and rotor housing are matched to provide a correct running clearance of .002 and must be replaced in sets.

If examination shows no excessive wear of drive shaft and port plate assembly, and the grease packed bearing (24251) feels smooth with no excessive bind as the shaft is rotated, further disassembly is not necessary. If inspection indicates need for replacement of any of the above mentioned parts, it is recommended that the machine be returned to the factory for service. Field replacement of these parts may be made providing reasonable care is used in servicing the assembly. Disassemble as follows: remove the key (24723) from the shaft; remove the Truarc retaining ring (29457) holding the bearing in the port plate, using a No. 2 Truarc internal pliers; press the assembled shaft and bearing out of the port plate as shown in figure 8; remove the Truarc ring (29459) retaining bearing on shaft and press shaft from bearing bore.

NOTE: The four retaining rings, 29457, 20307, 29458, and 29459 are bowed. When assembling, position the rings with the hump away from the part the ring is retaining.

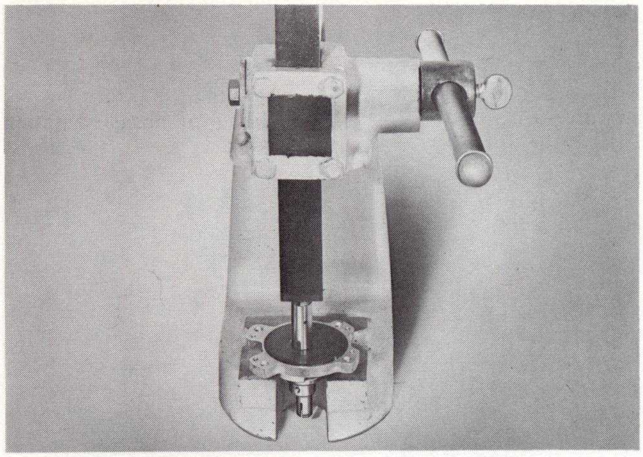


FIG. 8

ASSEMBLY OF MACHINE

Assembly may be made by reversing the foregoing procedure and following the additional instructions as outlined. Before the rotor (1000213) can be reassembled with the drive shaft (1000283), the washer (1000301) and "O" ring (25870) must be removed. After the rotor is positioned on the drive shaft, grease the "O" ring and seat it into rotor counterbore. Next press the washer (flat side down) into its seat above the "O" ring, a press fit must be maintained. Required interference fit can be obtained by bending rim of washer to increase O.D. Pack the needle bearing in the inlet port plate assembly (1000337) with a good grade of bearing grease and lubricate the shaft seal before mounting, to complete motor assembly (1000357). With the motor assembly fastened to the track assembly (1000677), attach the lower counterweight (1000272) to the drive shaft (1000283). The drive shaft is tapped from one side only, to receive the mounting screw, thereby properly positioning the counterweight.

Assemble gib springs (1000691) and gib axle assemblies (1000827) into bore of sleeve axle assemblies (1000817). Locate the two sub-assemblies in the track assembly as shown in figure 9 and with a feeler gauge, check the clearance between the end of the sleeve axle assembly and the adjacent phenolic block of the gib axle assembly. The clearance at this point should be .001 to .004. If the clearance is greater than specified, add combinations of shim washers (1000602) until correct spacing is obtained.

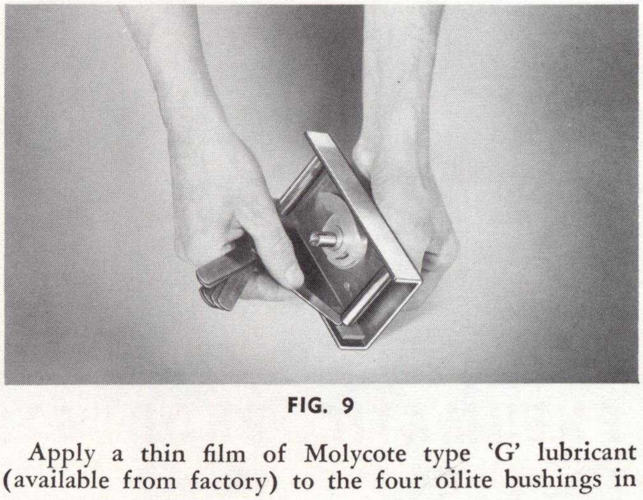


FIG. 9

Apply a thin film of Molycote type 'G' lubricant (available from factory) to the four oilite bushings in the shoe assembly (1000658). Remove the shimmed axle sub-assemblies from the track assembly and install in shoe assembly. The motor and track assemblies can now be assembled to the shoe assembly; the axle assemblies must be located at the same ends of the track assembly for which they were shimmed.

Apply Molycote type 'G' or an equivalent anti-seize compound to taper plug (1005102) prior to tightening into drive shaft (1000283) to prevent galling or seizing on the threads. This assures easy removal of the taper plug if necessary. Tighten taper plug to expand drive shaft applying 45 in lbs. torque. If a torque wrench is not available, set plug with standard 1/8 hexagon Allen wrench using short leg in socket. The taper plug must be extremely tight. The force necessary to tighten will deflect the long leg of the wrench 10° *after plug will no longer turn.* It is important that the taper plug be tightened as specified to expand the eccentric end of the drive shaft to cause an interference fit with the bearing in the shoe assembly; this in conjunction with the shim washers (1004992) and bowed retaining ring (20307) at the end of the shaft locks together the complete assembly. Inspect to determine that top surfaces of the 4 phenolic blocks are in contact with the track assembly, figure 10.

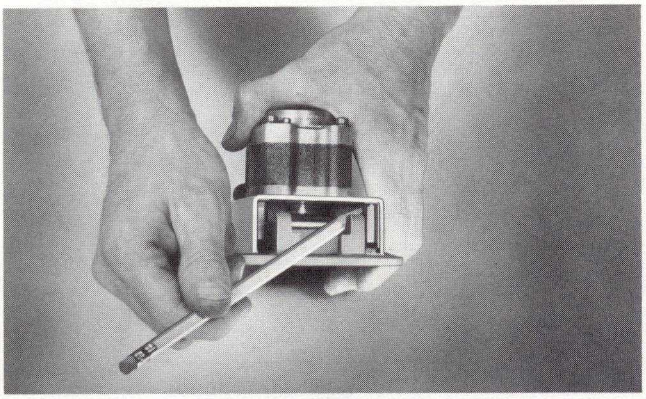


FIG. 10

Fill the cavity in the shoe assembly below the bearing with a good grade of bearing grease and press a new bearing seal (1005311) into place.

The governor and counterweight assembly (1000327) must be positioned on the drive shaft (1000283) with the crescent shaped brass part displaced 180 degrees on the shaft or diametrically opposite to the lower counterweight.

Lubricate "O" ring (25872) before assembling the housing assembly (1000878) to the track assembly. Locate end seals (1000783) and spacers (1000772) in position, checking that end seals are in contact against end of track assembly, after the housing assembly is attached in place, figure 11.

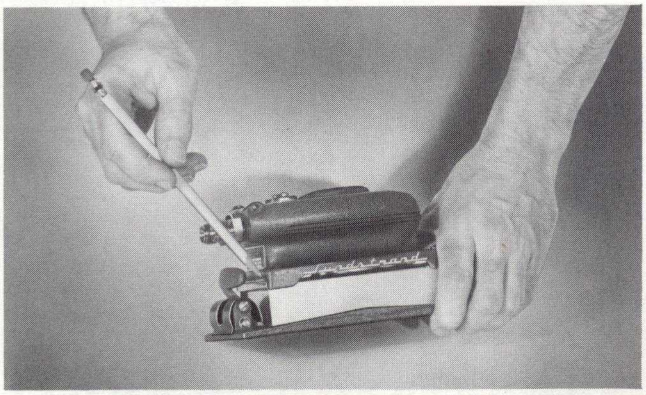
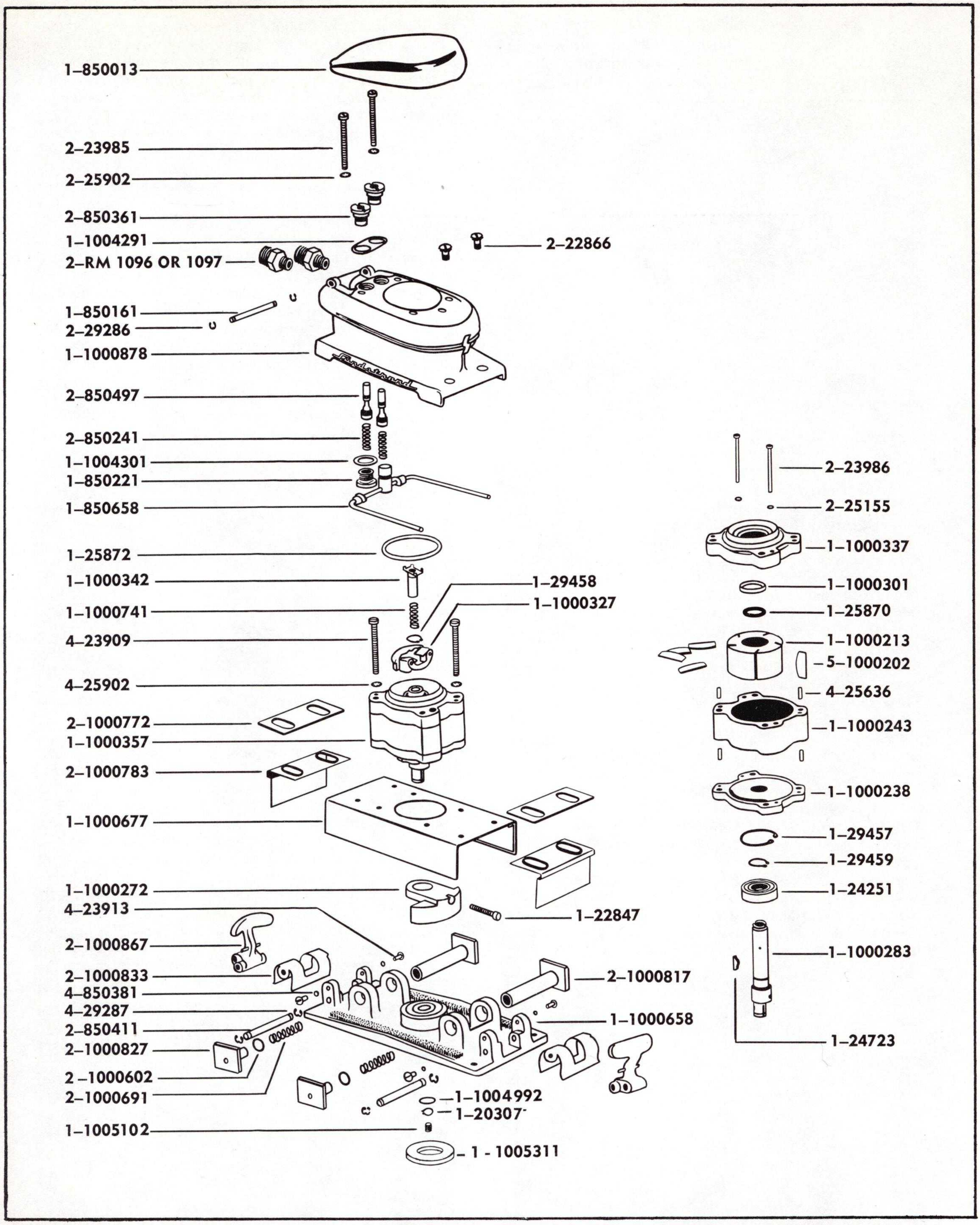


FIG. 11


1–850013
2–23985
2–25902
2–850361
1–1004291
2–RM 1096 OR 1097
2–22866
1–850161
2–29286
1–1000878
2–850497
2–850241
1–1004301
1–850221
1–850658
2–23986
2–25155
1–1000337
1–25872
1–1000342
1–29458
1–1000327
1–1000741
1–1000301
1–25870
4–23909
1–1000213
5–1000202
4–25902
4–25636
2–1000772
1–1000357
1–1000243
2–1000783
1–1000238
1–1000677
1–29457
1–29459
1–1000272
1–24251
4–23913
1–22847
2–1000867
1–1000283
2–1000833
2–1000817
4–850381
4–29287
1–1000658
2–850411
2–1000827
1–24723
2 –1000602
2–1000691
1–1004992
1–20307
1–1005102
1 - 1005311

SUNDSTRAND MAGNETIC-PNEUMATIC PRODUCTS

DIVISION OF SUNDSTRAND MACHINE TOOL CO.

1020 NINTH STREET ROCKFORD, ILLINOIS U. S. A.

Form No. OS-700-1

Litho in U. S. A.

MODEL OS-700 *Single Pad—Wet or Dry—Orbital Action*

Model OS-700	Description	Number Used Per Machine	Net Price Each
20307	Truarc Bowed Retaining Ring	1	$ .06
22847	Screw — Socket Hd. 8-32 x 1″	1	.15
22866	Screw — Oval Hd. 10-32 x 7/16″	2	.03
23909	Screw — Fil. Hd. 10-32 x 1-11/16″	4	.02
23913	Clip Assembly Screw	4	.01
23985	Screw — Fil. Hd. 10-32 x 1¾″	2	.02
23986	Screw — Fil. Hd. 5-44 x 1½″	2	.02
24251	Bearing	1	1.50
24723	Key	1	.08
25155	Shakeproof Washer	2	.01
25870	O-Ring	1	.15
25872	O-Ring	1	.30
25902	Shakeproof Washer	6	.01
29286	Truarc Retaining Ring	2	.04
29287	Truarc Retaining Ring	4	.04
29457	Truarc Bowed Retaining Ring	1	.12
29458	Truarc Bowed Retaining Ring	1	.12
29459	Truarc Bowed Retaining Ring	1	.06
850013	Cover	1	1.00
850161	Cover Pin	1	.15
850221	Valve Plug	1	.35
850241	Valve Spring	2	.25
850361	Valve Sleeve	2	.25
850381	Spacer	4	.03
850411	Clip Pin	2	.08
850497	Valve Stem Assembly	2	.30
850658	Water Tube Assembly	1	3.00
1000202	Vane	5	.25
1000213	Rotor	1	12.00
1000238	Exhaust Port Plate Assembly	1	4.75
1000243	Rotor Housing	1	7.75
1000272	Lower Counterweight	1	3.50
1000283	Drive Shaft	1	9.00
1000301	Washer	1	.15
1000304	Shim Washer	—	.03
1000327	Governor and Counterweight Assembly	1	5.50
1000337	Inlet Port Plate Assembly	1	3.50
1000342	Governor Sleeve	1	3.50
1000357	Motor Assembly	1	40.00
1000602	Gib Axle Shim (.002, .005, .008 and .015)	*	.03
1000658	Shoe Assembly	1	8.50
1000677	Track Assembly	1	5.50
1000691	Gib Spring	2	.10
1000741	Governor Spring	1	.05
1000772	Spacer	2	.15
1000783	End Seal	2	.35
1000817	Axle Assembly — Sleeve	2	2.25
1000827	Axle Assembly — Gib	2	1.75
1000833	Clip Spring	2	.40
1000867	Clip Arm Assembly	2	1.35
1000878	Housing Assembly	1	6.85
1004291	Air and Water Valve Gasket	1	.03
1004301	Air Valve Gasket	1	.02
1004992	Shim Washer (.005, .020 and .032)	*	.02
1005102	Taper Plug	1	.15
1005311	Bearing Seal	1	.03
RM-1096	Adapter (9/16 - 20)	2	.35
RM-1097	Adapter (¼ - 18)	2	.35

***Number used per machine varies depending on clearance. (See service bulletin)**

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.
A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

Model 1000

MODEL 1000A *Two Pad—Wet or Dry—Straight Line Action*

*Model 1000-A	Two-pad air sander, equipped with water-flushing attachment. For either "wet" or "dry" sanding. Machine only, less shoes, pads, hose and lubricator (Note: This machine requires two shoes and two pads.)	$140.00
*Model 1000-A	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1053 Felt (small) URM-2119 Felt (large)	$156.00
*Model 1000-A	With the small URM-1041 shoes, and complete with the following pad: URM-1108 Felt (small)	$158.00
*Model 1000-A	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1049 Rubber (small) URM-1060 Rubber (small) URM-2166 Rubber (large) URM-1050-3 Rubber (small) URM-2166-2 Rubber (large) URM-4010 Rubber (large) URM-2131 Felt (large)	$160.00

*Note: Hose connections on Sander may be had with either 1/4-18 pipe thread (RM-1097 Adapter), or 9/16-20 thread (RM-1096 Adapter).

1/4" LUBRICATOR AND AIR CONTROL UNIT

(One for each sander)

COMPLETE — Filter, Regulator, Gauge and Oiler — 1001925	$31.20

Oiler only (10407)	$12.00
Filter only (10409)	9.00
Regulator only (10410)	8.45
Gauge only (10411)	1.75

COMBINATION	
Oiler-Filter (10412)	$21.00
Regulator-Gauge (1001924)	$10.20

HOSE

(Two lengths for "Wet" Sanding — one for "Dry")

*15 Ft.	URM-1112	1/4" air or water hose, with couplings	$ 4.95
*25 Ft.	URM-1111	1/4" air or water hose, with couplings	$ 6.95
*50 Ft.	C-4147	1/4" air or water hose, with couplings	$11.95

*Couplings on hose may be had with either 1/4-18 pipe thread (C-3876 Couplings), or 9/16-20 thread (C-3804 Couplings).

COUPLINGS only, 1/4-18 p.t. (C-3876), or 9/16-20 (C-3804)	.75 ea.
ADAPTER — 851577 — for connecting hose coupling to water supply. Female end connects to 3/4" hose pipe thread; male end accommodates 1/4-18 coupling on hose	$ 1.25

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.

A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

FORM 1000A-1 JANUARY 1, 1956

MODEL 1000F *Two Pad—Dry—Straight Line Action*

*Model 1000-F	Two-pad air sander. Similar to 1000-A except it has no water-flushing attachment. For "dry" sanding. Machine only, less shoes, pads, hose and lubricator (Note: This machine requires two shoes and two pads.)	$135.00
*Model 1000-F	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1053 Felt (small) URM-2119 Felt (large)	$151.00
*Model 1000-F	With the small URM-1041 shoes, and complete with the following pad: URM-1108 Felt (small)	$153.00
*Model 1000-F	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1049 Rubber (small) URM-1050-3 Rubber (small) URM-1060 Rubber (small) URM-2166-2 Rubber (large) URM-2166 Rubber (large) URM-4010 Rubber (large) URM-2131 Felt (large)	$155.00

*Note: Hose connections on Sander may be had with either ¼-18 pipe thread (RM-1097 Adapter), or 9/16-20 thread (RM-1096 Adapter).

¼" LUBRICATOR AND AIR CONTROL UNIT

(One for each sander)

COMPLETE — Filter, Regulator, Gauge and Oiler — 1001925	$31.20

Oiler only (10407)	$12.00
Filter only (10409)	9.00
Regulator only (10410)	8.45
Gauge only (10411)	1.75

COMBINATION

Oiler-Filter (10412)	$21.00
Regulator-Gauge (1001924)	$10.20

HOSE

(Two lengths for "Wet" Sanding — one for "Dry")

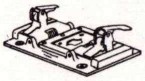
*15 Ft.	URM-1112	¼" air or water hose, with couplings	$ 4.95
*25 Ft.	URM-1111	¼" air or water hose, with couplings	$ 6.95
*50 Ft.	C-4147	¼" air or water hose, with couplings	$11.95

*Couplings on hose may be had with either ¼-18 pipe thread (C-3876 Couplings), or 9/16-20 thread (C-3804 Couplings).

COUPLINGS only, ¼-18 p.t. (C-3876), or 9/16-20 (C-3804)	.75 ea.
ADAPTER — 851577 — for connecting hose coupling to water supply. Female end connects to ¾" hose pipe thread; male end accommodates ¼-18 coupling on hose	$ 1.25

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

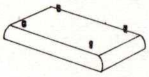
Shoes and Pads for
MODELS 1000 and 4000
Sundstrand Air Sanders

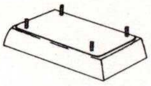


URM-1041 SHOE

For small surfaces — complete with sandpaper clamps. One pair required for each sander. Will accommodate pads listed below .... $10.00 pr.

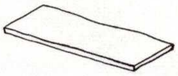
FELT PADS





With expendable aluminum plate for sanding and rubbing:

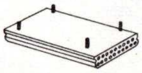
URM-1053	½″ Felt — Abrasive sheet size 3″ x 7½″	6.00 pr.
URM-1108	¾″ Felt — Abrasive sheet size 3″ x 7¾″	8.00 pr.

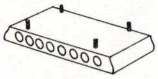


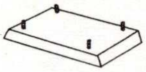
Wrap-around felt pad for padding filler and polishing:

C-4135	3″ x 8″ Woven Type	.60 ea.
RM-1080	3″ x 7¼″ Pressed Type	.20 ea.

OIL RESISTANT



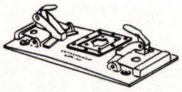




Rubber pads for dry sanding or for use with rubbing lubricants:

URM-1049	Soft mattress pad — Abrasive sheet size 2¾″ x 6¾″	10.00 pr.
URM-1050-3*	Soft tubular pad — Abrasive sheet size 2¾″ x 9″	10.00 pr.
URM-1060	Hard mattress pad — Abrasive sheet size 2¾″ x 7¼″	10.00 pr.

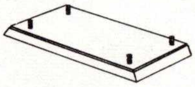
*This pad can also be used with water.



URM-2165 SHOE

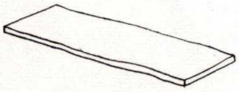
For large surfaces — complete with sandpaper clamps. One pair required for each sander. Will accommodate pads listed below .... 10.00 pr.

FELT PADS



With expendable aluminum plate for sanding and rubbing:

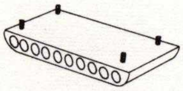
URM-2119	⅜″ Felt — Abrasive sheet size 3⅔″ x 9″	6.00 pr.
URM-2131	½″ Felt — Abrasive sheet size 3⅔″ x 9¾″	10.00 pr.



Wrap-around felt pad for filler padding and polishing:

RM-1069	3½″ x 10″ Woven Type	.75 ea.
RM-1083	3½″ x 10″ Pressed Type	.25 ea.

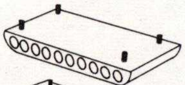
RUBBER PADS

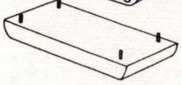


For dry sanding or use with water:

URM-2166	Soft tubular pad — Abrasive sheet size 3⅔″ x 9″	10.00 pr.

OIL RESISTANT





Rubber pads for dry sanding, or for use with oil, oleum spirits or rubbing wax:

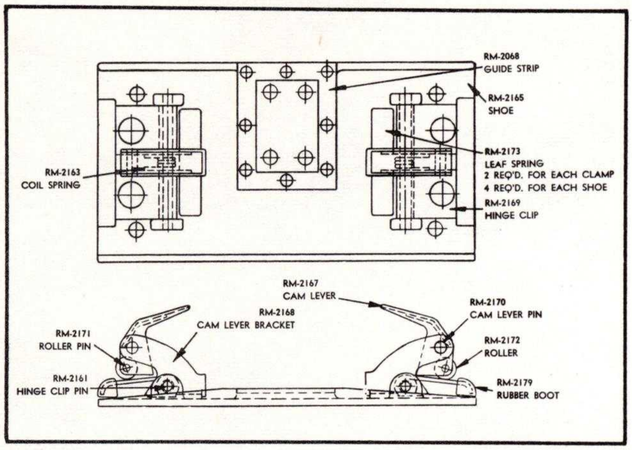
URM-2166-2	Soft tubular pad — Abrasive sheet size 3⅔″ x 9″	10.00 pr.
URM-4010	Mattress pad — Abrasive sheet size 3⅔″ x 9″	10.00 pr.

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.

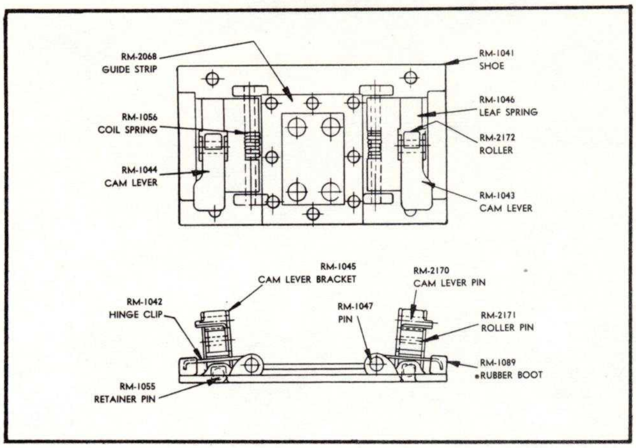
A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

URM-2165


RM-2068
GUIDE STRIP
RM-2165
SHOE
RM-2173
LEAF SPRING
2 REQ'D. FOR EACH CLAMP
4 REQ'D. FOR EACH SHOE
RM-2163
COIL SPRING
RM-2169
HINGE CLIP
RM-2167
CAM LEVER
RM-2168
CAM LEVER BRACKET
RM-2170
CAM LEVER PIN
RM-2171
ROLLER PIN
RM-2172
ROLLER
RM-2161
HINGE CLIP PIN
RM-2179
RUBBER BOOT

Part No.	Description	Net Price Each
URM-2165	Shoe complete with clamps	5.00
URM-2165	Shoe, less clamps	3.00
RM-2161	Pin, for RM-2169 Hinge Clip	$ .10
RM-2163	Coil Spring	.10
URM-2167	Cam Lever Assembly, which includes: RM-2171 Roller Pin, and RM-2172 Roller	.40
RM-2168	Cam Lever Bracket	.20
RM-2169	Hinge Clip	.20
RM-2170	Cam Lever Pin	.10
RM-2171	Roller Pin, supplied assembled with RM-2167	—
RM-2172	Roller, supplied assembled with RM-2167	—
RM-2173	Leaf Spring (2 Req'd for each Clamp)	.05
RM-2179	Clamp Boot	.30

URM-1041


RM-2068
GUIDE STRIP
RM-1041
SHOE
RM-1056
COIL SPRING
RM-1046
LEAF SPRING
RM-2172
ROLLER
RM-1044
CAM LEVER
RM-1043
CAM LEVER
RM-1045
CAM LEVER BRACKET
RM-2170
CAM LEVER PIN
RM-1042
HINGE CLIP
RM-1047
PIN
RM-2171
ROLLER PIN
RM-1089
•RUBBER BOOT
RM-1055
RETAINER PIN

Part No.	Description	Net Price Each
URM-1041	Shoe complete with clamps	$5.00
URM-1041	Shoe, less clamps	2.25
RM-1042	Hinge Clip	.20
URM-1043	Left Hand Cam Lever Assembly, which includes: RM-2171 Roller Pin, and RM-2172 Roller	.40
URM-1044	Right Hand Cam Lever Assembly, which includes: RM-2171 Roller Pin, and RM-2172 Roller	.40
RM-1045	Cam Lever Bracket	.20
RM-1046	Leaf Spring	.05
RM-1047	Pin, for RM-1042 Hinge Clip	.07
RM-1055	Retainer Pin, for RM-1045 Cam Lever Bracket	.05
RM-1056	Coil Spring	.10
RM-1089	Clamp Boot	.30
RM-2170	Cam Lever Pin	.10

Prices are net, f.o.b. Rockford, Illinois.

Subject to change without notice.

Minimum Billing $2.50

Operating and Service Information

FOR

SUNDSTRAND
MODEL 1000
WET AND DRY
SANDERS

The Sundstrand Pneumatic Opposed Pad Sander operates at the high speed of 2500 to 3500 oscillations per minute (depending on air pressure) to produce fine finishes in the shortest possible time and with the least operator effort. It is made of carefully selected materials and with the finest of workmanship. When properly installed with a Moisture Trap or Air Cleaner, Air Pressure Regulator and Automatic Lubricator and treated with the reasonable care outlined in this folder, your Sundstrand Sander will give long and trouble-free service.

The instructions given apply to both wet and dry models, 1000A and 1000F respectively. Part numbers, as charted on back page, apply to both models unless otherwise indicated.

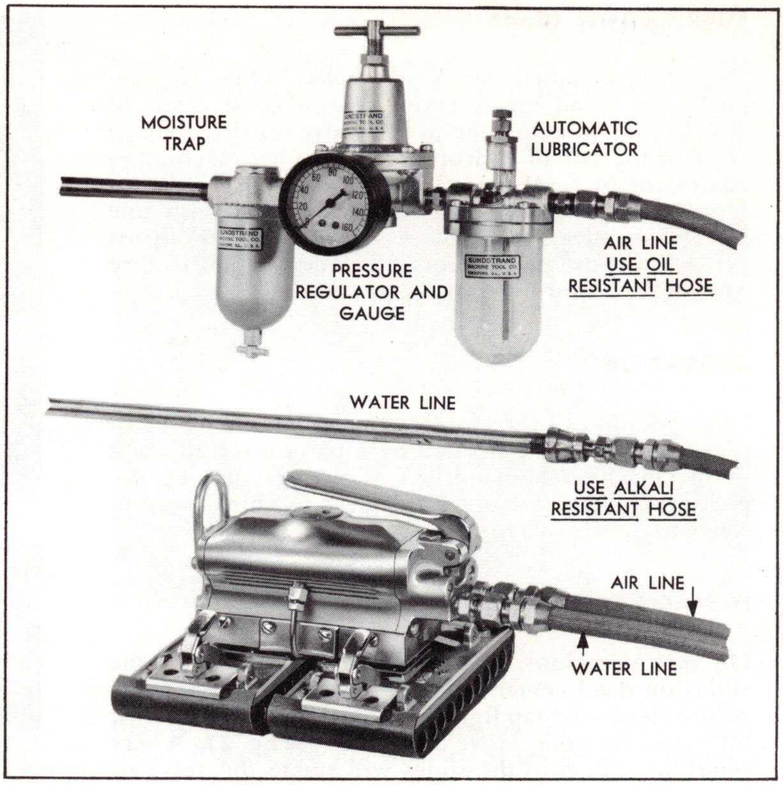

MOISTURE TRAP
AUTOMATIC LUBRICATOR
PRESSURE REGULATOR AND GAUGE
AIR LINE USE OIL RESISTANT HOSE
WATER LINE
USE ALKALI RESISTANT HOSE
AIR LINE
WATER LINE

FIG. 1

CORRECT ARRANGEMENT OF UNITS

The ideal arrangement for a Sundstrand Sander installation has a Moisture Trap and Air Cleaner, a Pressure Regulator and an Automatic Lubricator in the order shown in figure 1. For most satisfactory operation, place the Pressure Regulator and Gauge within easy reach of the operator so that adjustments can readily be made for any changes desired in delivery of air from the main air line. Use oil resistant hose for air line and alkali resistant hose for water line.

MOISTURE TRAP AND AIR CLEANER

Clean, dry air is essential to satisfactory operation of any air tool. With a Moisture Trap and Air Cleaner, the lime, scale and any other impurities as well as moisture condensation in the air line can be trapped before reaching the machine. Moisture Trap should be drained often.

AIR PRESSURE REGULATOR

The Air Pressure Regulator should be set at 65 but not over 90 pounds, depending on the amount of cut to be taken on the abrading surface and hand pressure necessary to obtain the desired results.

LUBRICATION

If the machine stands idle for any period of time, before starting, pour approximately 25 to 30 drops of oil in air line (good grade of No. 20 oil). Connect air line and run machine away from the work until excess oil has been blown out.

The life of the machine is dependent upon proper lubrication and care. For best results, an automatic lubricator is very essential. The automatic lubricator can be set to provide the amount of oil necessary for best operating results of the machine, avoiding excessive lubrication which might over-run the machine and reach the work.

SUNDSTRAND MAGNETIC-PNEUMATIC PRODUCTS
DIVISION OF SUNDSTRAND MACHINE TOOL CO.
1020 NINTH STREET ROCKFORD, ILLINOIS U. S. A.

LUBRICATION (Cont.)

Operation of lubricator is automatic. Only requirements are to fill the reservior with a good grade of No. 20 oil and adjust the needle valve for distribution of oil at the rate of ¾ drop per minute per machine — equivalent to a valve setting of *3 drops in 4 minutes.* If two machines are used in combination with one lubricator, valve should be set to distribute 1½ drops per minute or an amount sufficient for lubricating properly without overflowing on work.

OPERATION

The operation of the machine is very simple with pad movement being controlled by a palm lever adjacent to the machine housing. A slight pressure by the palm of the hand when gripping the machine housing starts pad reciprocation.

IF MACHINE FAILS TO START

On rare occasions, the machine may stop with the slides on dead center. To free the slides, release air control lever and tap lightly with palm of hand against the shoes until they move off center (see fig. 2). A very small movement of the slides will rotate the valve so that the normal flow of air will operate the machine.

Dirt or grit may be obstructing the valve. Remove Valve Plug RM-3155 on top of housing (see parts list on back page). Lift out Operating Valve RM-3064-1, and clean out air holes.

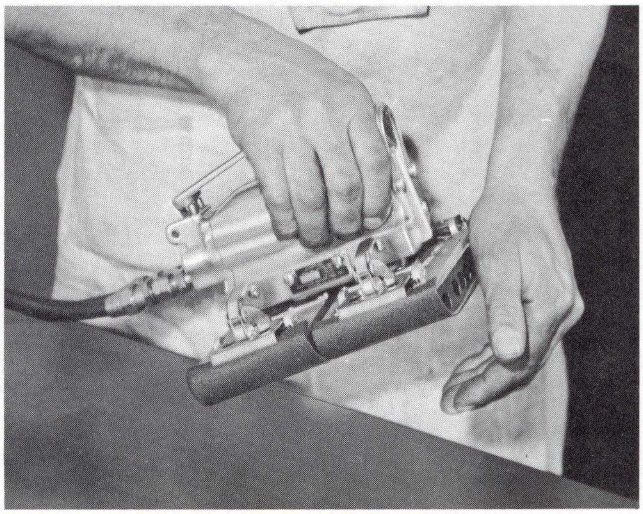


FIG. 2

HOW TO CHANGE PAPER

The spring clips of Model URM-2165 will hold up to 6 sheets of abrasive paper and URM-1041 up to 4 sheets, depending upon the coarseness of the grit. Overloading the clips bends the pin and elongates the hole in the shoe, causing misalignment of clip and uneven holding pressure. Using the proper size and number of sheets of paper for the pad, clip one end and stretch snugly over the pad, as shown in figure 3.

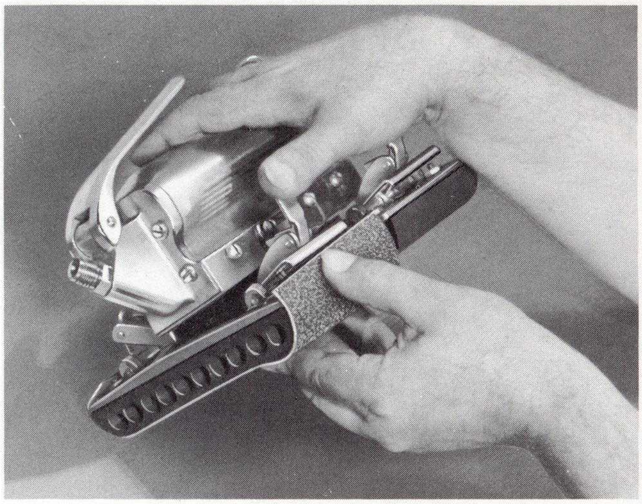


FIG. 3

HOW TO CHANGE PADS

Remove abrasive paper from spring clips. Loosen the four nuts on each corner of shoe, see figure 4, and lift off the pad. In replacing pad on shoe, make sure these nuts are tight.

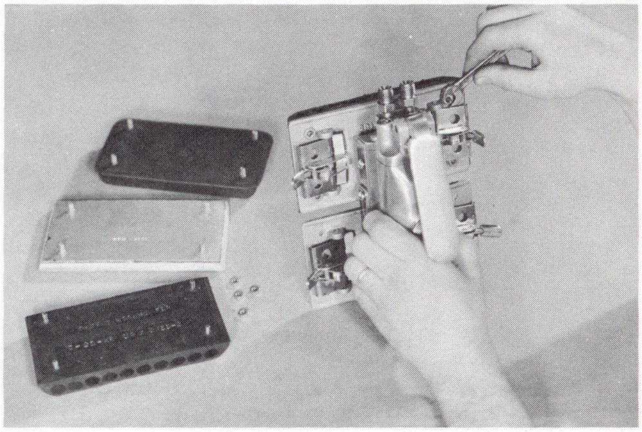


FIG. 4

HOW TO CHANGE SHOE

With pad removed (see figure 5) unscrew the four flathead screws, disconnecting the shoe from the slide. *Caution:* When replacing shoe, see that the slide driver is seated evenly in the rectangular driving ring on top of shoe, and screw down tightly.

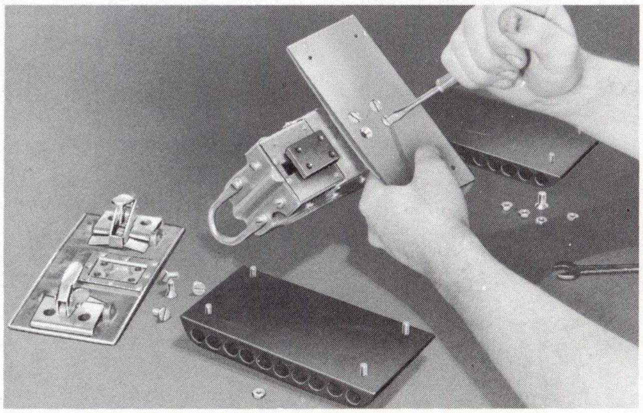


FIG. 5

SERVICE INFORMATION

Attention to the following points on your machine will insure maximum performance and extend the life of the machine. Most important is to keep the *gibs in proper adjustment,* as explained in the following paragraph.

LOOSE GIBS AND HOW TO ADJUST THEM

Normal wear will gradually develop a looseness of the gibs. A knocking or metallic noise is caused by play between the bearing plate and slides, which indicates the gibs should be adjusted. To adjust gibs, remove shoes from slides and place sander in vise; loosen all gib and end plate screws about ¼ turn, or *just enough* to permit movement by tapping with hammer against a wood block (see figure 6). Retighten gib screws and end plate screws.

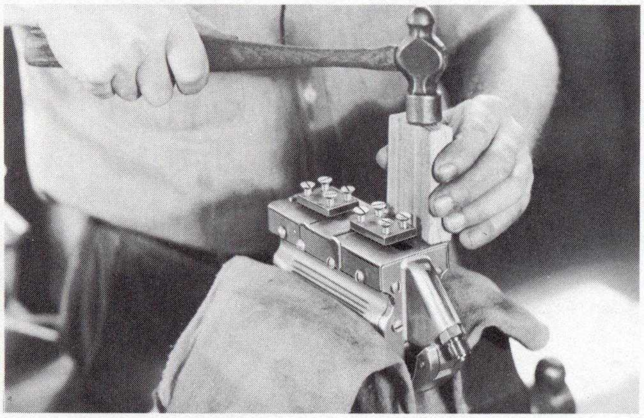


FIG. 6

If slides become worn to the point of replacement, it is recommended that they be *replaced as a set or pair.* However, if one of the slides shows no appreciable wear, it may be retained and one new slide installed, using the following procedure: Obtain the micrometer measurement on the corners of used slide as shown in figure 7. Grind the new slide to same dimension of used slide. (figure 8) so that gibs will clamp both sides with equal pressure.

FIG. 7

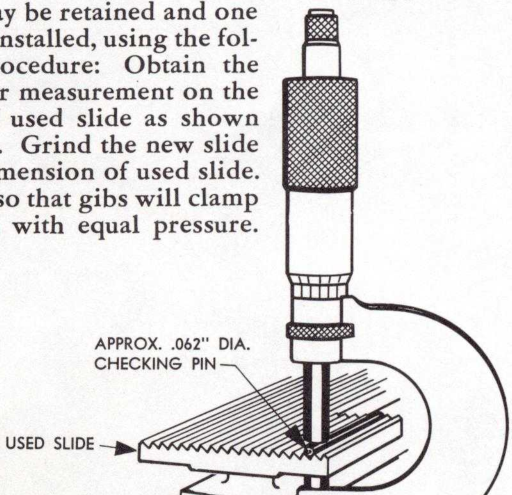
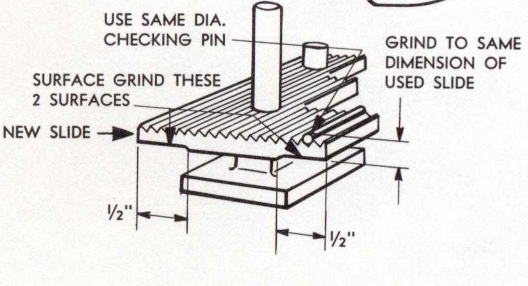


FIG. 8



CHECK FOR LOOSE FITTING SHOE

Constant operation of sander over a period of time tends to loosen the screws which hold the shoes to the slides. When this occurs, remove the pads and tighten the screws (four in each slide) as shown in figure 9.

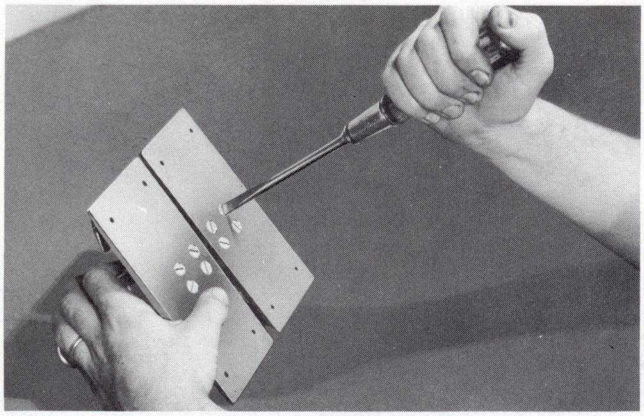


FIG. 9

CHECK FOR LOOSE FITTING PAD

Excess pad and paper wear and shoe damage will occur if pads are not kept tight on shoe. The four nuts (see figure 10) on the pad bolts must be kept tight to prevent wearing of bolt threads and elongating shoe holes. When machine is in constant use, check several times a day as shown.

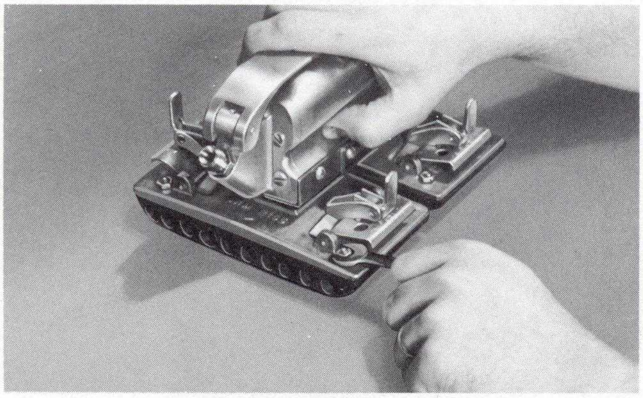


FIG. 10

SUNDSTRAND GUARANTEE

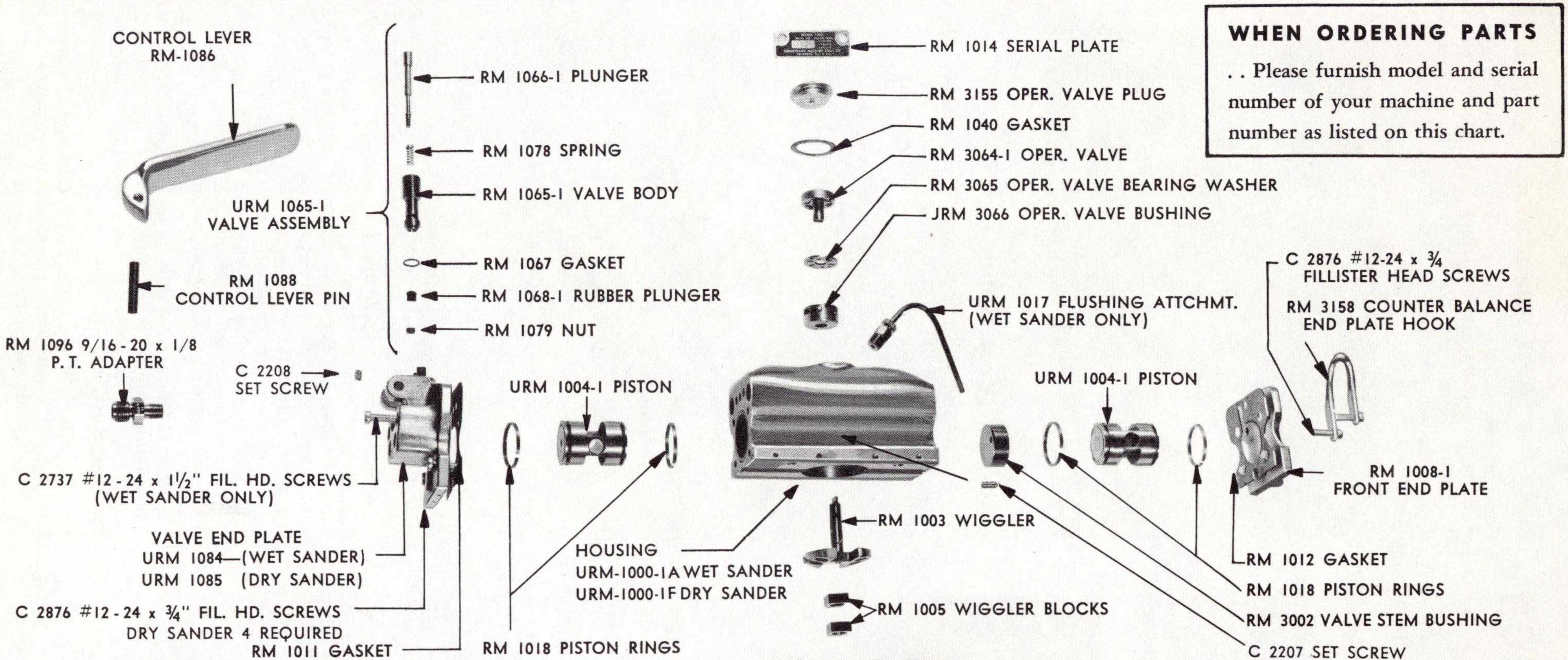
This Sundstrand Sander is guaranteed against defects in material and workmanship for a period of ninety (90) days after delivery to the original user. This guarantee does not cover the repair or replacement of parts normally considered expendable such as sanding pads, or repairs caused by accident, abuse or neglect. Any sander appearing defective within the guarantee period must be returned to the factory, (or nearest authorized Sundstrand Dealer) transportation charges prepaid, for our examination.

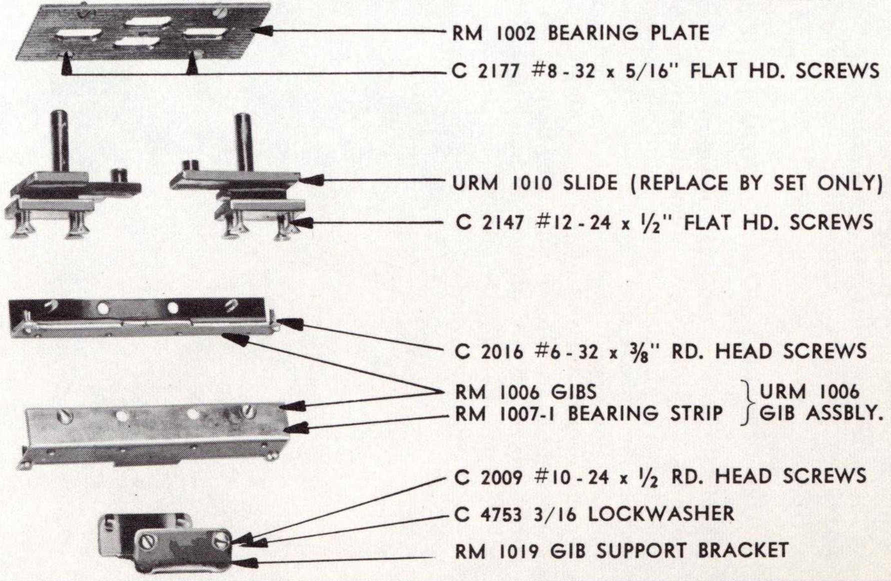
This guarantee is valid only if registration card accompanying sander is returned within two weeks after receipt to the manufacturer, Sundstrand Machine Tool Co., Rockford, Illinois.

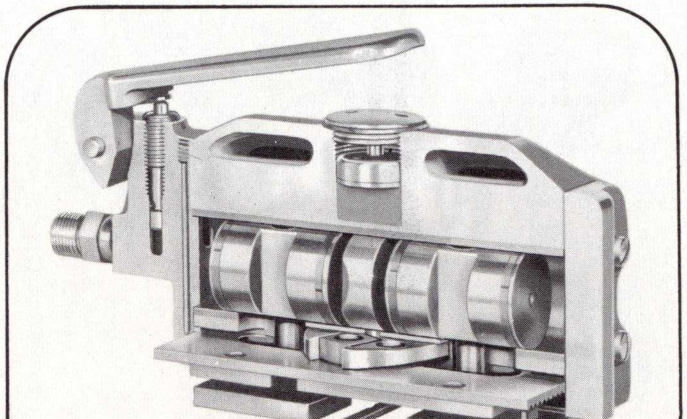
No obligation will be assumed by Sundstrand Machine Tool Co. to incorporate future design changes on sanders of prior sale.

WHEN ORDERING PARTS

. . Please furnish model and serial number of your machine and part number as listed on this chart.


CONTROL LEVER
RM-1086
URM 1065-1
VALVE ASSEMBLY
RM 1066-1 PLUNGER
RM 1078 SPRING
RM 1065-1 VALVE BODY
RM 1067 GASKET
RM 1068-1 RUBBER PLUNGER
RM 1079 NUT
RM 1088
CONTROL LEVER PIN
RM 1096 9/16 - 20 x 1/8
P. T. ADAPTER
C 2208
SET SCREW
C 2737 #12 - 24 x 1½" FIL. HD. SCREWS
(WET SANDER ONLY)
VALVE END PLATE
URM 1084—(WET SANDER)
URM 1085 (DRY SANDER)
C 2876 #12 - 24 x ¾" FIL. HD. SCREWS
DRY SANDER 4 REQUIRED
RM 1011 GASKET
URM 1004-1 PISTON
RM 1018 PISTON RINGS
HOUSING
URM-1000-1A WET SANDER
URM-1000-1F DRY SANDER
RM 1014 SERIAL PLATE
RM 3155 OPER. VALVE PLUG
RM 1040 GASKET
RM 3064-1 OPER. VALVE
RM 3065 OPER. VALVE BEARING WASHER
JRM 3066 OPER. VALVE BUSHING
URM 1017 FLUSHING ATTCHMT.
(WET SANDER ONLY)
RM 1003 WIGGLER
RM 1005 WIGGLER BLOCKS
URM 1004-1 PISTON
C 2876 #12-24 x ¾
FILLISTER HEAD SCREWS
RM 3158 COUNTER BALANCE
END PLATE HOOK
RM 1008-1
FRONT END PLATE
RM 1012 GASKET
RM 1018 PISTON RINGS
RM 3002 VALVE STEM BUSHING
C 2207 SET SCREW


RM 1002 BEARING PLATE
C 2177 #8 - 32 x 5/16" FLAT HD. SCREWS
URM 1010 SLIDE (REPLACE BY SET ONLY)
C 2147 #12 - 24 x ½" FLAT HD. SCREWS
C 2016 #6 - 32 x ⅜" RD. HEAD SCREWS
RM 1006 GIBS
RM 1007-1 BEARING STRIP
URM 1006
GIB ASSBLY.
C 2009 #10 - 24 x ½ RD. HEAD SCREWS
C 4753 3/16 LOCKWASHER
RM 1019 GIB SUPPORT BRACKET


CUTAWAY VIEW OF
MODEL 1000 SANDER

MODELS 1000 A & F *Two Pad—Wet or Dry—Straight Line Action*

Model 1000-A (Wet)	Model 1000-F (Dry)	Description	Number Used Per Machine "A"	Number Used Per Machine "F"	Net Price Each
URM-1000-1A	URM-1000-1F	Housing Assembly (Includes sleeve, RM-3002 and URM-3066 Bushings	1	1	$36.00
RM-1002	RM-1002	Bearing Plate	1	1	5.50
RM-1003	RM-1003	Wiggler	1	1	11.00
URM-1004-1	URM-1004-1	Piston Assembly (less rings)	2	2	10.00
RM-1005	RM-1005	Wiggler Block	2	2	2.75
URM-1006	URM-1006	Gib Assembly (RM-1006 and RM-1007-1)	2	2	1.25
RM-1006	RM-1006	Gib (less RM-1007-1 Bearing Strip)	2	2	.75
RM-1007-1	RM-1007-1	Bearing Strip for RM-1006 Gib	2	2	.30
—	—	Rivets for Bearing Strip	8	8	M 1.00
RM-1008-1	RM-1008-1	Front End Plate	1	1	3.00
URM-1010	URM-1010	Slide Assembly	2	2	11.25
RM-1011	RM-1011	Valve End Plate Gasket	1	1	.05
RM-1012	RM-1012	Front End Plate Gasket	1	1	.05
RM-1014	RM-1014	Serial Plate	1	1	.15
URM-1017	—	Flushing Attachment Assembly	1	—	1.50
RM-1018	RM-1018	Piston Ring	4	4	.40
RM-1019	RM-1019	Gib Support Bracket	1	1	.75
RM-1040	RM-1040	Valve Plug Gasket	1	1	.05
URM-1065-1	URM-1065-1	New Style Inlet Valve Assembly	2	1	1.85
RM-1065-1	RM-1065-1	New Style Inlet Valve Body	2	1	.40
RM-1066-1	RM-1066-1	New Style Inlet Valve Plunger	2	1	.15
RM-1067	RM-1067	New Style Inlet Valve Gasket	2	1	.05
RM-1068-1	RM-1068-1	New Style Inlet Valve Stop	2	1	.20
RM-1078	RM-1078	New Style Inlet Valve Spring	2	1	.10
RM-1079	RM-1079	New Style Inlet Valve Nut	2	1	.05
URM-1084	—	Valve End Plate Assembly, with URM-1065-1 (two)	1	—	15.00
—	URM-1085	Valve End Plate Assembly, with URM-1065-1	—	1	10.00
RM-1086	RM-1086	Control Lever Assembly	1	1	3.00
RM-1088-1	RM-1088-1	Control Lever Pin	1	1	.30
RM-1096	RM-1096	9/16"-20 x ⅛" P.T. Adapter	2	1	.35
RM-1097	RM-1097	¼" x ⅛" Adapter	2	1	.35
RM-3002	RM-3002	Valve Stem Bushing	1	1	1.50
RM-3064-1	RM-3064-1	Operating Valve	1	1	6.25
RM-3065	RM-3065	Operating Valve Bearing Washer	1	1	2.50
URM-3066	URM-3066	Operating Valve Bushing	1	1	6.25
RM-3155	RM-3155	Operating Valve Plug	1	1	1.75
RM-3158	RM-3158	End Plate Hook	1	1	.55
C-2009	C-2009	10-24 x ½" R.H. Screw (for gib)	8	8	.02
C-2016	C-2016	6-32 x ⅜" R.H. Screw (for gib)	8	8	.02
C-2147	C-2147	12-24 x ½" F.H. Screw (for pad)	8	8	.02
C-2177	C-2177	8-32 x 5/16" F.H. Screw (Bearing Plate)	4	4	.02
C-2207	C-2207	8-32 x ⅜" Set Screw (for Bushing)	1	1	.10
C-2208	C-2208	8-32 x ¼" Set Screw (RM-1088)	1	1	.10
C-2737	—	12-24 x 1½" Fil. Hd. Screw (VE Plate)	2	—	.03
C-2876	C-2876	12-24 x ¾" Fil. Hd. Screw (E Plate)	6	8	.02
C-4753	C-4753	3/16" Lock Washer	8	8	.02

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL. SUNDSTRAND

A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

FORM 1000AF-3 JANUARY 1, 1956

Model 4000

MODEL 4000A *Two Pad—Wet or Dry—Straight Line Action*

*Model 4000-A	Two-pad air sander, equipped with water-flushing attachment. For either "wet" or "dry" sanding. Machine only, less shoes, pads, hose and lubricator	$150.00
	(Note: This machine requires two shoes and two pads)	
*Model 4000-A	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1053 Felt (small) URM-2119 Felt (large)	$166.00
*Model 4000-A	With the small URM-1041 shoes, and complete with the following pad: URM-1108 Felt (small)	$168.00
*Model 4000-A	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1049 Rubber (small) URM-1060 Rubber (small) URM-2166 Rubber (large) URM-1050-3 Rubber (small) URM-2166-2 Rubber (large) URM-4010 Rubber (large) URM-2131 Felt (large)	$170.00

*Note: Hose connections on Sander may be had with either 1/4-18 pipe thread (RM-1097 Adapter), or 9/16-20 thread (RM-1096 Adapter).

1/4" LUBRICATOR AND AIR CONTROL UNIT

(One for each sander)

COMPLETE — Filter, Regulator, Gauge and Oiler — 1001925	$31.20

Oiler only (10407)	$12.00	COMBINATION	
Filter only (10409)	9.00		
Regulator only (10410)	8.45	Oiler-Filter (10412)	$21.00
Gauge only (10411)	1.75	Regulator-Gauge (1001924)	$10.20

HOSE

(Two lengths for "Wet" Sanding — one for "Dry")

*15 Ft.	URM-1112	1/4" air or water hose, with couplings	$ 4.95
*25 Ft.	URM-1111	1/4" air or water hose, with couplings	$ 6.95
*50 Ft.	C-4147	1/4" air or water hose, with couplings	$11.95

*Couplings on hose may be had with either 1/4-18 pipe thread (C-3876 Couplings), or 9/16-20 thread (C-3804 Couplings).

COUPLINGS only, 1/4-18 p.t. (C-3876), or 9/16-20 (C-3804)	.75 ea.
ADAPTER — 851577 — for connecting hose coupling to water supply. Female end connects to 3/4" hose pipe thread; male end accommodates 1/4-18 coupling on hose	$ 1.25

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.
A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

FORM 4000A-1 JANUARY 1, 1956

MODEL 4000A *Two Pad—Wet or Dry—Straight Line Action*

*Model 4000-A	Two-pad air sander, equipped with water-flushing attachment. For either "wet" or "dry" sanding. Machine only, less shoes, pads, hose and lubricator	$150.00
	(Note: This machine requires two shoes and two pads)	
*Model 4000-A	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1053 Felt (small) URM-2119 Felt (large)	$166.00
*Model 4000-A	With the small URM-1041 shoes, and complete with the following pad: URM-1108 Felt (small)	$168.00
*Model 4000-A	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1049 Rubber (small) URM-1060 Rubber (small) URM-2166 Rubber (large) URM-1050-3 Rubber (small) URM-2166-2 Rubber (large) URM-4010 Rubber (large) URM-2131 Felt (large)	$170.00

*Note: Hose connections on Sander may be had with either ¼-18 pipe thread (RM-1097 Adapter), or 9/16-20 thread (RM-1096 Adapter).

¼" LUBRICATOR AND AIR CONTROL UNIT

(One for each sander)

COMPLETE — Filter, Regulator, Gauge and Oiler — 1001925 .... $31.20

Oiler only (10407)	$12.00	COMBINATION	
Filter only (10409)	9.00		
Regulator only (10410)	8.45	Oiler-Filter (10412)	$21.00
Gauge only (10411)	1.75	Regulator-Gauge (1001924)	$10.20

HOSE

(Two lengths for "Wet" Sanding — one for "Dry")

*15 Ft.	URM-1112	¼" air or water hose, with couplings	$ 4.95
*25 Ft.	URM-1111	¼" air or water hose, with couplings	$ 6.95
*50 Ft.	C-4147	¼" air or water hose, with couplings	$11.95

*Couplings on hose may be had with either ¼-18 pipe thread (C-3876 Couplings), or 9/16-20 thread (C-3804 Couplings).

COUPLINGS only, ¼-18 p.t. (C-3876), or 9/16-20 (C-3804)	.75 ea.
ADAPTER — 851577 — for connecting hose coupling to water supply. Female end connects to ¾" hose pipe thread; male end accommodates ¼-18 coupling on hose	$ 1.25

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.
A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

MODEL 4000F *Two Pad—Dry—Straight Line Action*

*Model 4000-F	Two-pad air sander, similar to 4000-A except it has no water-flushing attachment. For "dry" sanding. Machine only, less shoes, pads, hose and lubricator (Note: This machine requires two shoes and two pads)	**$145.00**
*Model 4000-F	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1053 Felt (small) URM-2119 Felt (large)	**$161.00**
*Model 4000-F	With the small URM-1041 shoes, and complete with the following pad: URM-1108 Felt (small)	**$163.00**
*Model 4000-F	With either the small URM-1041 or large URM-2165 shoes, and complete with any of the following pads: URM-1049 Rubber (small) URM-1060 Rubber (small) URM-2166 Rubber (large) URM-1050-3 Rubber (small) URM-2166-2 Rubber (large) URM-4010 Rubber (large) URM-2131 Felt (large)	**$165.00**

*Note: Hose connections on Sander may be had with either 1/4-18 pipe thread (RM-1097 Adapter), or 9/16-20 thread (RM-1096 Adapter).

1/4" LUBRICATOR AND AIR CONTROL UNIT

(One for each sander)

COMPLETE — Filter, Regulator, Gauge and Oiler — 1001925	$31.20

Oiler only (10407)	$12.00	COMBINATION	
Filter only (10409)	9.00		
Regulator only (10410)	8.45	Oiler-Filter (10412)	$21.00
Gauge only (10411)	1.75	Regulator-Gauge (1001924)	$10.20

HOSE

(Two lengths for "Wet" Sanding — one for "Dry")

*15 Ft.	URM-1112	1/4" air or water hose, with couplings	$ 4.95
*25 Ft.	URM-1111	1/4" air or water hose, with couplings	$ 6.95
*50 Ft.	C-4147	1/4" air or water hose, with couplings	$11.95

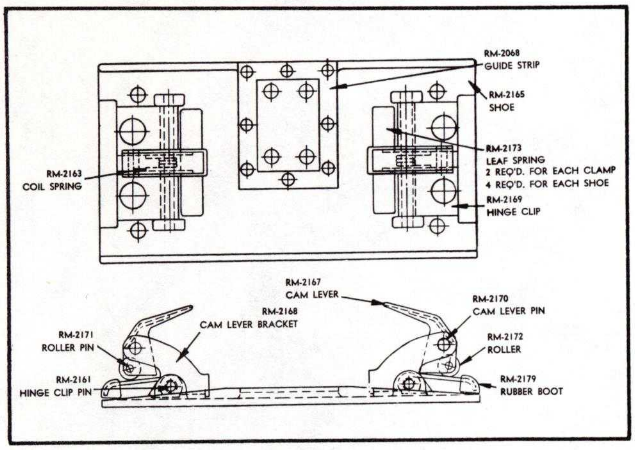
*Couplings on hose may be had with either 1/4-18 pipe thread (C-3876 Couplings), or 9/16-20 thread (C-3804 Couplings).

COUPLINGS only, 1/4-18 p.t. (C-3876), or 9/16-20 (C-3804)	.75 ea.
ADAPTER — 851577 — for connecting hose coupling to water supply. Female end connects to 3/4" hose pipe thread; male end accommodates 1/4-18 coupling on hose	$ 1.25

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

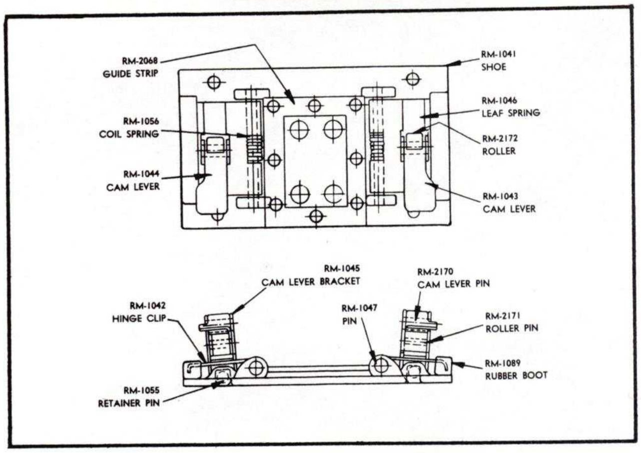
SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.
A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

URM-2165


RM-2068
GUIDE STRIP
RM-2165
SHOE
RM-2163
COIL SPRING
RM-2173
LEAF SPRING
2 REQ'D. FOR EACH CLAMP
4 REQ'D. FOR EACH SHOE
RM-2169
HINGE CLIP
RM-2167
CAM LEVER
RM-2168
CAM LEVER BRACKET
RM-2170
CAM LEVER PIN
RM-2171
ROLLER PIN
RM-2172
ROLLER
RM-2161
HINGE CLIP PIN
RM-2179
RUBBER BOOT

Part No.	Description	Net Price Each
URM-2165	Shoe complete with clamps	5.00
URM-2165	Shoe, less clamps	3.00
RM-2161	Pin, for RM-2169 Hinge Clip	$ .10
RM-2163	Coil Spring	.10
URM-2167	Cam Lever Assembly, which includes: RM-2171 Roller Pin, and RM-2172 Roller	.40
RM-2168	Cam Lever Bracket	.20
RM-2169	Hinge Clip	.20
RM-2170	Cam Lever Pin	.10
RM-2171	Roller Pin, supplied assembled with RM-2167	—
RM-2172	Roller, supplied assembled with RM-2167	—
RM-2173	Leaf Spring (2 Req'd for each Clamp)	.05
RM-2179	Clamp Boot	.30

URM-1041


RM-2068
GUIDE STRIP
RM-1041
SHOE
RM-1056
COIL SPRING
RM-1046
LEAF SPRING
RM-2172
ROLLER
RM-1044
CAM LEVER
RM-1043
CAM LEVER
RM-1045
CAM LEVER BRACKET
RM-2170
CAM LEVER PIN
RM-1042
HINGE CLIP
RM-1047
PIN
RM-2171
ROLLER PIN
RM-1089
RUBBER BOOT
RM-1055
RETAINER PIN

Part No.	Description	Net Price Each
URM-1041	Shoe complete with clamps	$5.00
URM-1041	Shoe, less clamps	2.25
RM-1042	Hinge Clip	.20
URM-1043	Left Hand Cam Lever Assembly, which includes: RM-2171 Roller Pin, and RM-2172 Roller	.40
URM-1044	Right Hand Cam Lever Assembly, which includes: RM-2171 Roller Pin, and RM-2172 Roller	.40
RM-1045	Cam Lever Bracket	.20
RM-1046	Leaf Spring	.05
RM-1047	Pin, for RM-1042 Hinge Clip	.07
RM-1055	Retainer Pin, for RM-1045 Cam Lever Bracket	.05
RM-1056	Coil Spring	.10
RM-1089	Clamp Boot	.30
RM-2170	Cam Lever Pin	.10

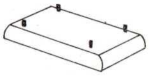
Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

Shoes and Pads for
MODELS 1000 and 4000
Sundstrand Air Sanders

URM-1041 SHOE

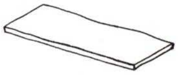
	For small surfaces — complete with sandpaper clamps. One pair required for each sander. Will accommodate pads listed below	$10.00 pr.

FELT PADS



With expendable aluminum plate for sanding and rubbing:

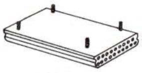
URM-1053	½″ Felt — Abrasive sheet size 3″ x 7½″	6.00 pr.
URM-1108	¾″ Felt — Abrasive sheet size 3″ x 7¾″	8.00 pr.

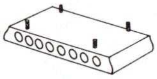


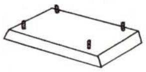
Wrap-around felt pad for padding filler and polishing:

C-4135	3″ x 8″ Woven Type	.60 ea.
RM-1080	3″ x 7¼″ Pressed Type	.20 ea.

OIL RESISTANT



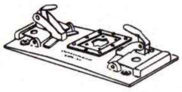




Rubber pads for dry sanding or for use with rubbing lubricants:

URM-1049	Soft mattress pad — Abrasive sheet size 2¾″ x 6¾″	10.00 pr.
URM-1050-3*	Soft tubular pad — Abrasive sheet size 2¾″ x 9″	10.00 pr.
URM-1060	Hard mattress pad — Abrasive sheet size 2¾″ x 7¼″	10.00 pr.

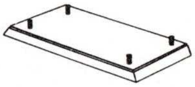
*This pad can also be used with water.



URM-2165 SHOE

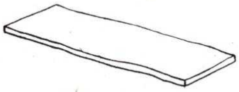
	For large surfaces — complete with sandpaper clamps. One pair required for each sander. Will accommodate pads listed below	10.00 pr.

FELT PADS



With expendable aluminum plate for sanding and rubbing:

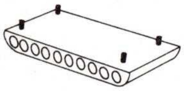
URM-2119	⅜″ Felt — Abrasive sheet size 3⅔″ x 9″	6.00 pr.
URM-2131	½″ Felt — Abrasive sheet size 3⅔″ x 9¾″	10.00 pr.



Wrap-around felt pad for filler padding and polishing:

RM-1069	3½″ x 10″ Woven Type	.75 ea.
RM-1083	3½″ x 10″ Pressed Type	.25 ea.

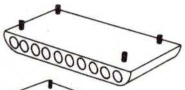
RUBBER PADS

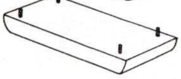


For dry sanding or use with water:

URM-2166	Soft tubular pad — Abrasive sheet size 3⅔″ x 9″	10.00 pr.

OIL RESISTANT





Rubber pads for dry sanding, or for use with oil, oleum spirits or rubbing wax:

URM-2166-2	Soft tubular pad — Abrasive sheet size 3⅔″ x 9″	10.00 pr.
URM-4010	Mattress pad — Abrasive sheet size 3⅔″ x 9″	10.00 pr.

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.

A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

FORM 1400-2 JANUARY 1, 1956

Operating and Service Information

FOR

SUNDSTRAND
MODEL 4000
WET AND DRY
SANDERS

The Sundstrand Pneumatic Opposed Pad Sander operates at the high speed of 2000 to 3000 oscillations per minute (depending on air pressure) to produce fine finishes in the shortest possible time and with the least operator effort. It is made of carefully selected materials and with the finest of workmanship. When properly installed with a Moisture Trap or Air Cleaner, Air Pressure Regulator and Automatic Lubricator and treated with the reasonable care outlined in this folder, your Sundstrand Sander will give long and trouble-free service.

The instructions given apply to both wet and dry models, 4000A and 4000F respectively. Part numbers, as charted on back page, apply to both models unless otherwise indicated.

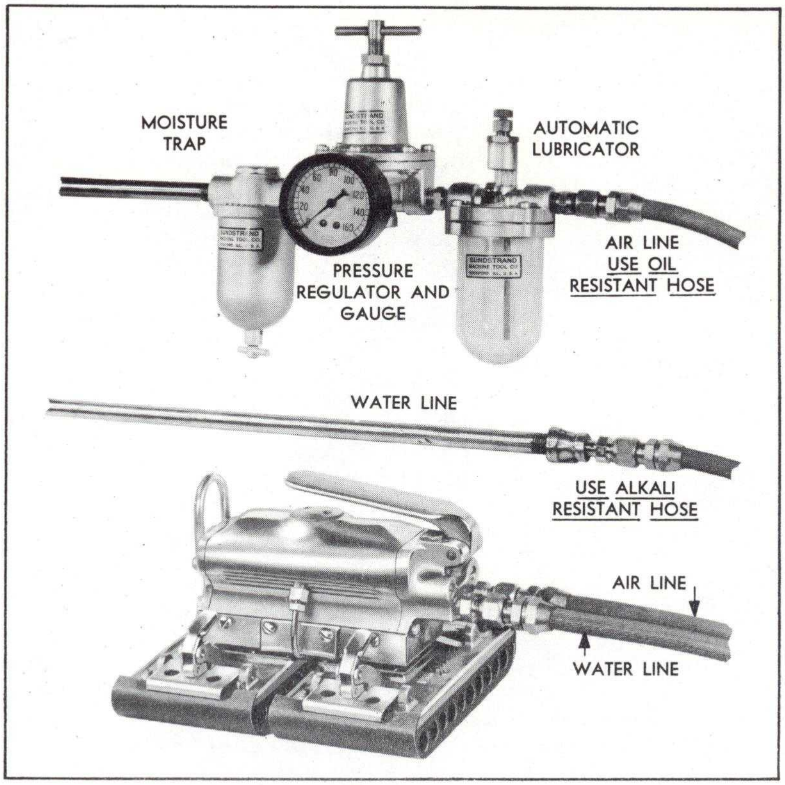

MOISTURE TRAP
AUTOMATIC LUBRICATOR
AIR LINE USE OIL RESISTANT HOSE
PRESSURE REGULATOR AND GAUGE
WATER LINE
USE ALKALI RESISTANT HOSE
AIR LINE
WATER LINE

FIG. 1

CORRECT ARRANGEMENT OF UNITS

The ideal arrangement for a Sundstrand Sander installation has a Moisture Trap and Air Cleaner, a Pressure Regulator and an Automatic Lubricator in the order shown in figure 1. For most satisfactory operation, place the Pressure Regulator and Gauge within easy reach of the operator so that adjustments can readily be made for any changes desired in delivery of air from the main air line. Use oil resistant hose for air line and alkali resistant hose for water line.

MOISTURE TRAP AND AIR CLEANER

Clean, dry air is essential to satisfactory operation of any air tool. With a Moisture Trap and Air Cleaner, the lime, scale and any other impurities as well as moisture condensation in the air line can be trapped before reaching the machine. Moisture Trap should be drained often.

AIR PRESSURE REGULATOR

The Air Pressure Regulator should be set at 65 but not over 90 pounds, depending on the amount of cut to be taken on the abrading surface and hand pressure necessary to obtain the desired results.

LUBRICATION

If the machine stands idle for any period of time, before starting, pour approximately 25 to 30 drops of oil in air line (good grade of No. 20 oil). Connect air line and run machine away from the work until excess oil has been blown out.

The life of the machine is dependent upon proper lubrication and care. For best results, an automatic lubricator is very essential. The automatic lubricator can be set to provide the amount of oil necessary for best operating results of the machine, avoiding excessive lubrication which might over-run the machine and reach the work.

SUNDSTRAND MACHINE TOOL CO.
PNEUMATIC MACHINE DIVISION
2531 ELEVENTH ST., ROCKFORD, ILLINOIS, U. S. A.

LUBRICATION (Cont.)

Operation of lubricator is automatic. Only requirements are to fill the reservior with a good grade of No. 20 oil and adjust the needle valve for distribution of oil at the rate of 3/4 drop per minute per machine — equivalent to a valve setting of *3 drops in 4 minutes.* If two machines are used in combination with one lubricator, valve should be set to distribute 1½ drops per minute or an amount sufficient for lubricating properly without overflowing on work.

OPERATION

The operation of the machine is very simple with pad movement being controlled by a palm lever adjacent to the machine housing. A slight pressure by the palm of the hand when gripping the machine housing starts pad reciprocation.

IF MACHINE FAILS TO START

On rare occasions, the machine may stop with the slides on dead center. To free the slides, release air control lever and tap lightly with palm of hand against the shoes until they move off center (see fig. 2). A very small movement of the slides will rotate the valve so that the normal flow of air will operate the machine.

Dirt or grit may be obstructing the valve. Remove Valve Plug RM-3155 on top of housing (see parts list on back page). Lift out Operating Valve RM-3064, and clean out air holes.

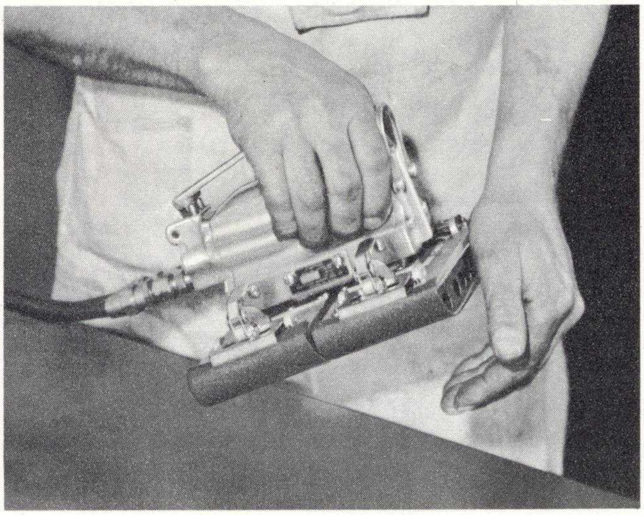


FIG. 2

HOW TO CHANGE PAPER

The spring clips of Model URM-2165 will hold up to 6 sheets of abrasive paper and URM-1041 up to 4 sheets, depending upon the coarseness of the grit. Overloading the clips bends the pin and elongates the hole in the shoe, causing misalignment of clip and uneven holding pressure. Using the proper size and number of sheets of paper for the pad, clip one end and stretch snugly over the pad, as shown in figure 3.

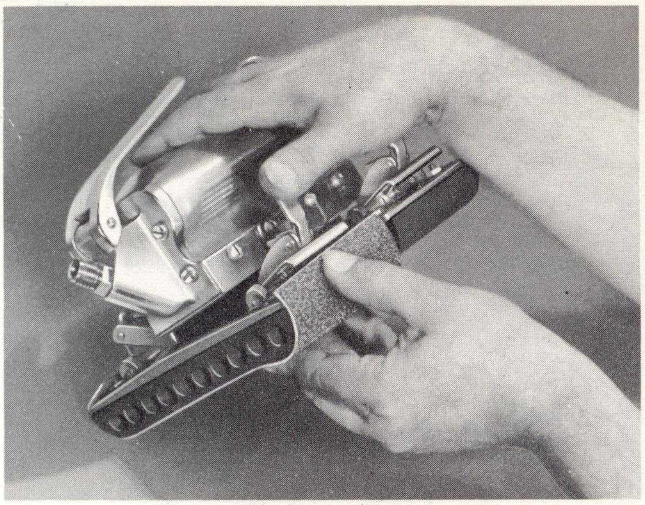


FIG. 3

HOW TO CHANGE PADS

Remove abrasive paper from spring clips. Loosen the four nuts on each corner of shoe, see figure 4, and lift off the pad. In replacing pad on shoe, make sure these nuts are tight.

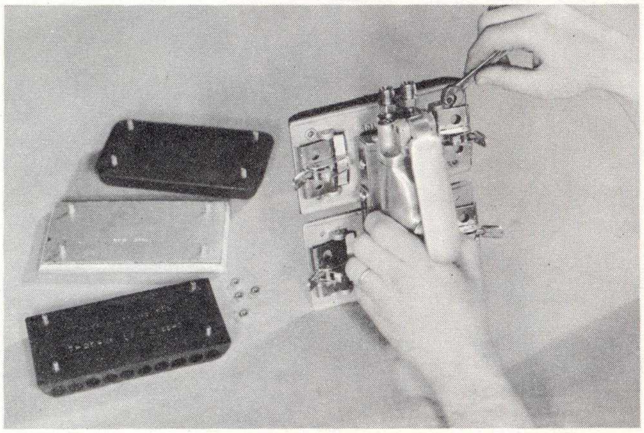


FIG. 4

HOW TO CHANGE SHOE

With pad removed (see figure 5) unscrew the four flathead screws, disconnecting the shoe from the slide. *Caution:* When replacing shoe, see that the slide driver is seated evenly in the rectangular driving ring on top of shoe, and screw down tightly.

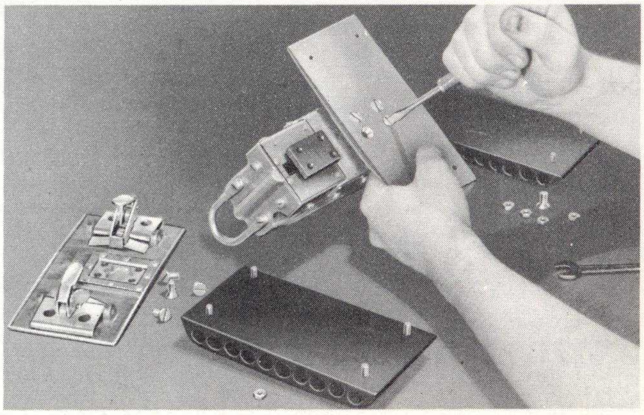


FIG. 5

SERVICE INFORMATION

Attention to the following points on your machine will insure maximum performance and extend the life of the machine. Most important is to keep the *gibs in proper adjustment,* as explained in the following paragraph.

LOOSE GIBS AND HOW TO ADJUST THEM

Normal wear will gradually develop a looseness of the gibs. A knocking or metallic noise is caused by play between the bearing plate and slides, which indicates the gibs should be adjusted. To adjust gibs, remove shoes from slides and place sander in vise; loosen all gib and end plate screws about ¼ turn, or *just enough* to permit movement by tapping with hammer against a wood block (see figure 6). Retighten gib screws and end plate screws.

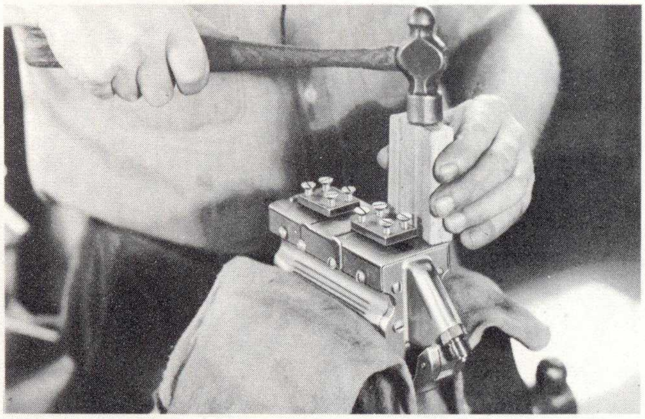


FIG. 6

If slides become worn to the point of replacement, it is recommended that they be *replaced as a set or pair.* However, if one of the slides shows no appreciable wear, it may be retained and one new slide installed, using the following procedure: Obtain the micrometer measurement on the corners of used slide as shown in figure 7. Grind the new slide to same dimension of used slide. (figure 8) so that gibs will clamp both sides with equal pressure.

FIG. 7

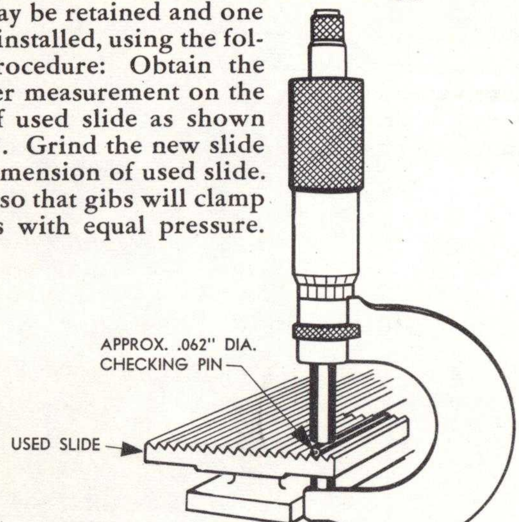
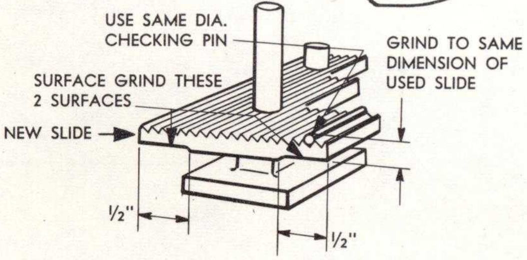


FIG. 8



CHECK FOR LOOSE FITTING SHOE

Constant operation of sander over a period of time tends to loosen the screws which hold the shoes to the slides. When this occurs, remove the pads and tighten the screws (four in each slide) as shown in figure 9.

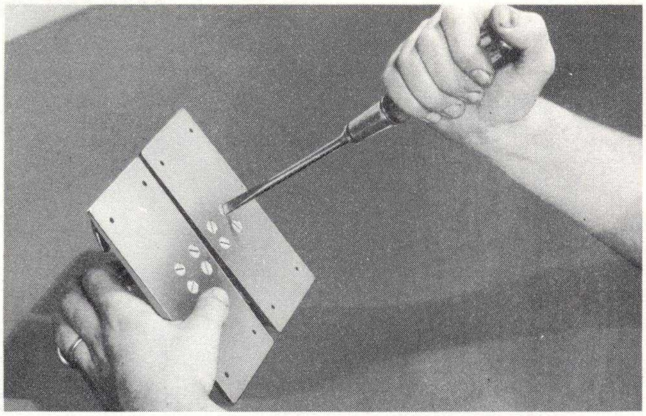


FIG. 9

CHECK FOR LOOSE FITTING PAD

Excess pad and paper wear and shoe damage will occur if pads are not kept tight on shoe. The four nuts (see figure 10) on the pad bolts must be kept tight to prevent wearing of bolt threads and elongating shoe holes. When machine is in constant use, check several times a day as shown.

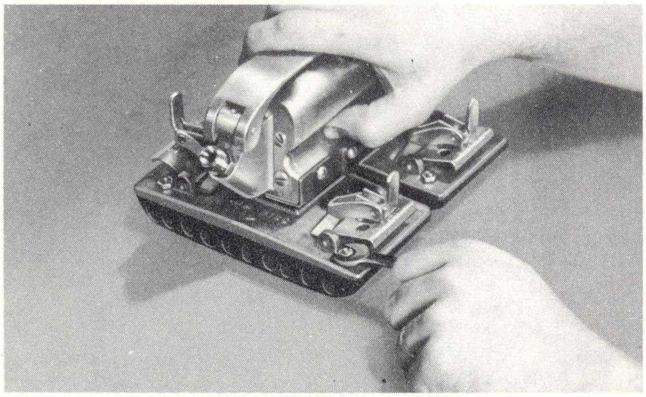


FIG. 10

SUNDSTRAND GUARANTEE

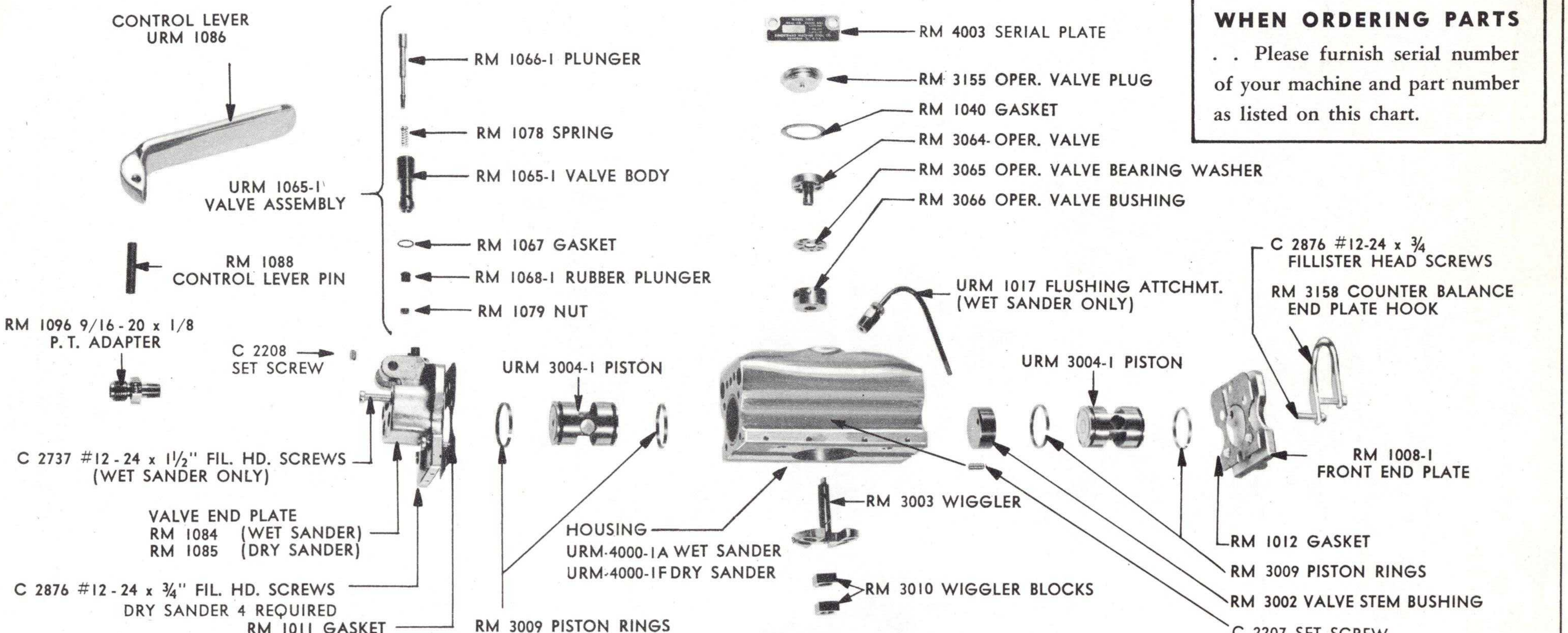
This Sundstrand Sander is guaranteed against defects in material and workmanship for a period of ninety (90) days after delivery to the original user. This guarantee does not cover the repair or replacement of parts normally considered expendable such as sanding pads, or repairs caused by accident, abuse or neglect. Any sander appearing defective within the guarantee period must be returned to the factory, (or nearest authorized Sundstrand Dealer) transportation charges prepaid, for our examination.

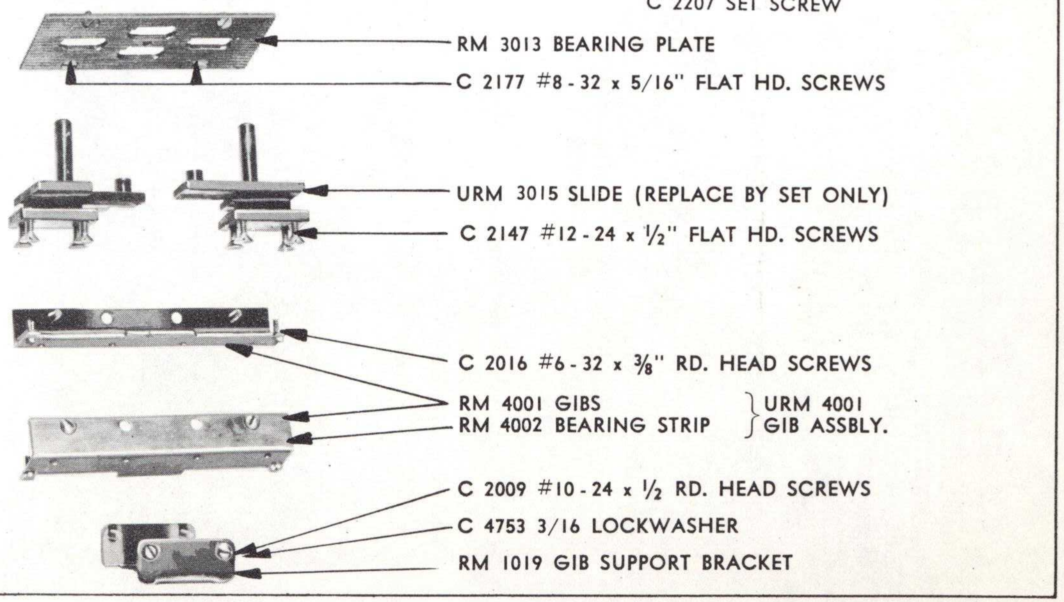
This guarantee is valid only if registration card accompanying sander is returned within two weeks after receipt to the manufacturer, Sundstrand Machine Tool Co., Rockford, Illinois.

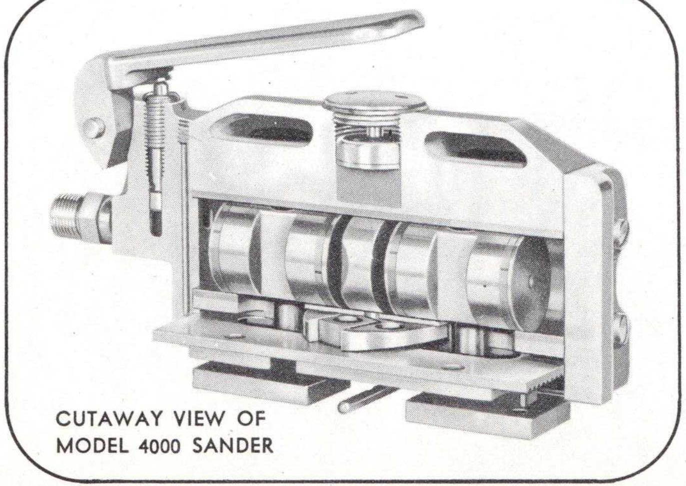
No obligation will be assumed by Sundstrand Machine Tool Co. to incorporate future design changes on sanders of prior sale.

WHEN ORDERING PARTS

. . Please furnish serial number of your machine and part number as listed on this chart.


CONTROL LEVER
URM 1086
URM 1065-1
VALVE ASSEMBLY
RM 1066-1 PLUNGER
RM 1078 SPRING
RM 1065-1 VALVE BODY
RM 1067 GASKET
RM 1068-1 RUBBER PLUNGER
RM 1079 NUT
RM 1088
CONTROL LEVER PIN
RM 1096 9/16 - 20 x 1/8
P. T. ADAPTER
C 2208
SET SCREW
C 2737 #12 - 24 x 1½" FIL. HD. SCREWS
(WET SANDER ONLY)
VALVE END PLATE
RM 1084 (WET SANDER)
RM 1085 (DRY SANDER)
C 2876 #12 - 24 x ¾" FIL. HD. SCREWS
DRY SANDER 4 REQUIRED
RM 1011 GASKET
URM 3004-1 PISTON
RM 3009 PISTON RINGS
HOUSING
URM-4000-1A WET SANDER
URM-4000-1F DRY SANDER
RM 4003 SERIAL PLATE
RM 3155 OPER. VALVE PLUG
RM 1040 GASKET
RM 3064- OPER. VALVE
RM 3065 OPER. VALVE BEARING WASHER
RM 3066 OPER. VALVE BUSHING
URM 1017 FLUSHING ATTCHMT.
(WET SANDER ONLY)
RM 3003 WIGGLER
RM 3010 WIGGLER BLOCKS
URM 3004-1 PISTON
C 2876 #12-24 x ¾
FILLISTER HEAD SCREWS
RM 3158 COUNTER BALANCE
END PLATE HOOK
RM 1008-1
FRONT END PLATE
RM 1012 GASKET
RM 3009 PISTON RINGS
RM 3002 VALVE STEM BUSHING
C 2207 SET SCREW


RM 3013 BEARING PLATE
C 2177 #8 - 32 x 5/16" FLAT HD. SCREWS
URM 3015 SLIDE (REPLACE BY SET ONLY)
C 2147 #12 - 24 x ½" FLAT HD. SCREWS
C 2016 #6 - 32 x ⅜" RD. HEAD SCREWS
RM 4001 GIBS
RM 4002 BEARING STRIP
URM 4001
GIB ASSBLY.
C 2009 #10 - 24 x ½ RD. HEAD SCREWS
C 4753 3/16 LOCKWASHER
RM 1019 GIB SUPPORT BRACKET



CUTAWAY VIEW OF
MODEL 4000 SANDER

MODELS 4000 A & F *Two Pad—Wet or Dry—Straight Line Action*

Model 4000-A (Wet)	Model 4000-F (Dry)	Description	Number Used Per Machine "A"	Number Used Per Machine "F"	Net Price Each
RM-1008-1	RM-1008-1	Front End Plate	1	1	$ 3.00
RM-1011	RM-1011	Valve End Plate Gasket	1	1	.05
RM-1012	RM-1012	Front End Plate Gasket	1	1	.05
URM-1017	———	Flushing Attachment Assembly	1	1	1.50
RM-1019	RM-1019	Gib Support Bracket	1	1	.75
RM-1040	RM-1040	Valve Plug Gasket	1	1	.05
URM-1065-1	URM-1065-1	New Style Inlet Valve Assembly	2	1	1.85
RM-1065-1	RM-1065-1	New Style Inlet Valve Body	2	1	.40
RM-1066-1	RM-1066-1	New Style Inlet Valve Plunger	2	1	.15
RM-1067	RM-1067	New Style Inlet Valve Gasket	2	1	.05
RM-1068-1	RM-1068-1	New Style Inlet Valve Stop	2	1	.20
RM-1078	RM-1078	New Style Inlet Valve Spring	2	1	.10
RM-1079	RM-1079	New Style Inlet Valve Nut	2	1	.05
URM-1084	———	Valve End Plate Assembly, with URM-1065-1 (two)	1	—	15.00
———	URM-1085	Valve End Plate Assembly, with URM-1065-1	—	1	10.00
RM-1086	RM-1086	Control Lever Assembly	1	1	3.00
RM-1088-1	RM-1088-1	Control Lever Pin	1	1	.30
RM-1096	RM-1096	9/16″-20 x ⅛″ P.T. Adapter	2	1	.35
RM-1097	RM-1097	¼″ x ⅛″ Adapter	2	1	.35
RM-3002	RM-3002	Valve Stem Bushing	1	1	1.50
RM-3003	RM-3003	Wiggler	1	1	11.50
URM-3004-1	URM-3004-1	Piston	2	2	10.00
RM-3009	RM-3009	Piston Ring	4	4	.40
RM-3010	RM-3010	Wiggler Block	2	2	2.75
RM-3013	RM-3013	Bearing Plate	1	1	6.75
URM-3015	URM-3015	Slide	2	2	12.50
RM-3064	RM-3064	Operating Valve	1	1	6.25
RM-3065	RM-3065	Operating Valve Bearing Washer	1	1	2.50
URM-3066	URM-3066	Operating Valve Bushing	1	1	6.25
RM-3155	RM-3155	Operating Valve Plug	1	1	1.75
RM-3158	RM-3158	End Plate Hook	1	1	.55
URM-4000-1A	URM-4000-1F	Housing	1	1	55.00
URM-4001	URM-4001	Gib Assembly (RM-4001 and RM-4002)	2	2	1.75
RM-4001	RM-4001	Gib (less RM-4002 Bearing Strip)	2	2	.95
RM-4002	RM-4002	Bearing Strip for RM-4001 Gib	2	2	.35
———	———	Rivets for Bearing Strip	12	12	M 1.00
RM-4003	RM-4003	Serial Plate	1	1	.15
C-2009	C-2009	10-24 x ½″ R.H. Screw (for Gibs)	8	8	.02
C-2016	C-2016	6-32 x ⅜″ R.H. Screw (for Gibs)	8	8	.02
C-2147	C-2147	12-24 x ½″ F.H. Screw (for Pad)	8	8	.02
C-2177	C-2177	8-32 x 5/16″ F.H. Screw (Bearing Plate)	4	4	.02
C-2207	C-2207	8-32 x ⅜″ Set Screw (for Bushing)	1	1	.10
C-2208	C-2208	8-32 x ¼″ Set Screw (RM-1088)	1	1	.10
C-2737	———	12-24 x ½″ Fil. Hd. Screw (VE Plate)	2	—	.03
C-2876	C-2876	12-24 x ¾″ Fil. Hd. Screw (E. Plate)	6	8	.02
C-4753	C-4753	3/16″ Lock Washer	8	8	.02

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.

A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

FORM 4000AF-3 JANUARY 1, 1956

Model 600

MODEL 600 *Two Pad—Heavy Duty—Straight Line Action*

Model 600	Two-Pad Air Sander. Machine only, less shoes, pads, hose and lubricator (Note: This machine requires two shoes and two pads.)	$295.00
Model 600	With URM-633 Shoes only	$304.00
Model 600	With URM-633 Shoes and Unit RM-642 Hard Felt Pad Attachments	$317.50
Model 600	With URM-633 Shoes and Unit EX-1433-11 Woven Felt Pad Attachments	$320.00
Model 600	With URM-689 Shoes only	$314.00
Model 600	With URM-689 Shoes and URM-2119 Felt pad	$320.00
Model 600	With URM-689 Shoes and any of the following pads: URM-2131 Felt — URM-2166 Rubber URM-2166-2 Rubber — URM-4010 Rubber	$324.00

3/8" LUBRICATOR AND AIR CONTROL UNIT

(One for each Sander)

COMPLETE	Filter, Regulator, Gauge and Oiler — 10418		$ 31.20
10417	Oiler and Filter only	$21.00	
10416	Regulator and Gauge only	$10.20	
10414	Oiler only	$12.00	
10415	Filter only	$ 9.00	

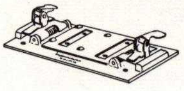
HOSE

(One length required for each sander)

12 Ft.	URM-96 3/8" air hose, with couplings and air cock	$ 11.00

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

Shoes and Pads for **MODEL 600** *Heavy Duty Sundstrand Air Sander*

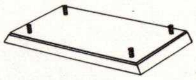


URM-689 SHOE

	Complete with sandpaper clamps. One pair required for each machine. Will accommodate any of the felt or rubber pads listed below	$19.00 pr.

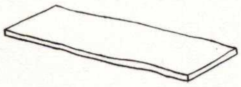
FELT PADS

With expendable aluminum plate for sanding and rubbing:

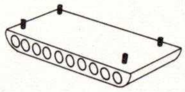


URM-2119	⅜" Felt — Abrasive sheet size 3⅔" x 9"	6.00 pr.
URM-2131	½" Felt — Abrasive sheet size 3⅔" x 9¾"	10.00 pr.

Wrap-around felt pad for padding filler and polishing:



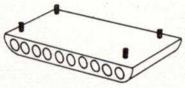
RM-1069	3½" x 10" Woven Type	.75 ea.
RM-1083	3½" x 10" Pressed Type	.25 ea.



RUBBER PAD

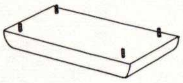
For dry sanding, or use with water:

URM-2166	Soft tubular pad — Abrasive sheet size 3⅔" x 9"	10.00 pr.

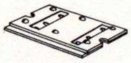


OIL RESISTANT

Rubber pad for dry sanding, or for use with oil, oleum spirits or rubbing wax:



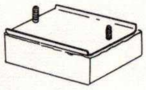
URM-2166-2	Soft tubular pad — Abrasive sheet size 3⅔" x 9"	10.00 pr.
URM-4010	Mattress pad — Abrasive sheet size 3⅔" x 9"	10.00 pr.



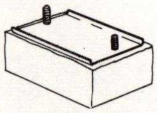
URM-633 SHOE

	One pair required for each sander. Used in combination with felt pads listed below	9.00 pr.

RUBBING FELTS



Unit RM-642	Holder with RM-646 regular Pressed Felt Pad. For pumice rubbing and polishing	13.50 pr.
RM-646	Felt only	6.00 pr.



Unit EX-1433-11 (W)	Holder with EX-1433-11 Woven Felt Pad. For pumice rubbing and polishing	16.00 pr.
EX-1433-11	Felt Pad only	8.75 pr.

URM-642	Holder only	6.50 pr.

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

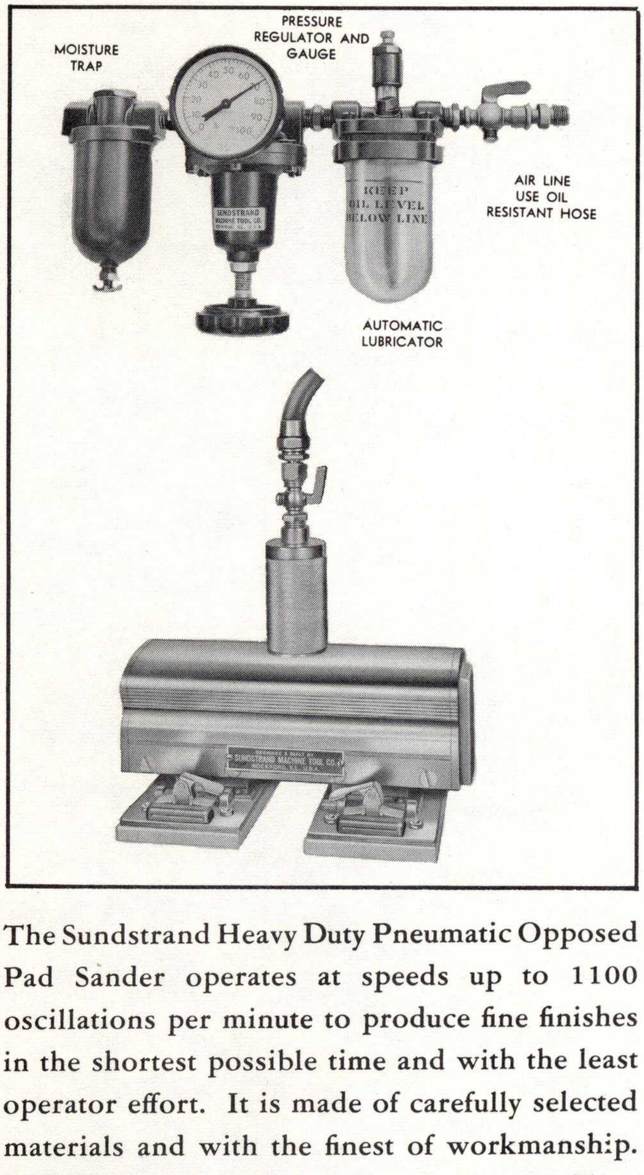
SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET ROCKFORD, ILL.

A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

Parts List and Service Information for

SUNDSTRAND MODEL 600

HEAVY DUTY SANDING AND RUBBING MACHINE


MOISTURE TRAP
PRESSURE REGULATOR AND GAUGE
KEEP OIL LEVEL BELOW LINE
AIR LINE USE OIL RESISTANT HOSE
AUTOMATIC LUBRICATOR

The Sundstrand Heavy Duty Pneumatic Opposed Pad Sander operates at speeds up to 1100 oscillations per minute to produce fine finishes in the shortest possible time and with the least operator effort. It is made of carefully selected materials and with the finest of workmanship. When properly installed with a Moisture Trap or Air Cleaner, Air Pressure Regulator and Automatic Lubricator and treated with reasonable care, your Sundstrand Sander will give long and trouble-free service.

CORRECT ARRANGEMENT OF UNITS

The ideal arrangement for a Sundstrand Sander installation has a Moisture Trap and Air Cleaner, a Pressure Regulator and an Automatic Lubricator in the order shown in figure 1. For most satisfactory operation, place the Pressure Regulator and Gauge within easy reach of the operator so that adjustments can readily be made for any changes desired in delivery of air from the main air line. Use oil resistant hose for air line.

MOISTURE TRAP AND AIR CLEANER

Clean, dry air is essential to satisfactory operation of any air tool. With a Moisture Trap and Air Cleaner, the lime, scale and any other impurities as well as moisture condensation in the air line can be trapped before reaching the machine. Moisture Trap should be drained often.

AIR PRESSURE REGUALTOR

The Air Pressure Regulator should be set at 80 but not over 90 pounds, depending on the amount of cut to be taken on the abrading surface and hand pressure necessary to obtain the desired results.

LUBRICATION

If the machine stands idle for any period of time, before starting, pour approximately 25 to 30 drops of oil in air line (good grade of No. 20 oil). Connect air line and run machine away from the work until excess oil has been blown out.

The life of the machine is dependent upon proper lubrication and care. For best results, an automatic lubricator is very essential. The automatic lubricator can be set to provide the amount of oil necessary for best operating results of the machine, avoiding excessive lubrication which might over-run the machine and reach the work.

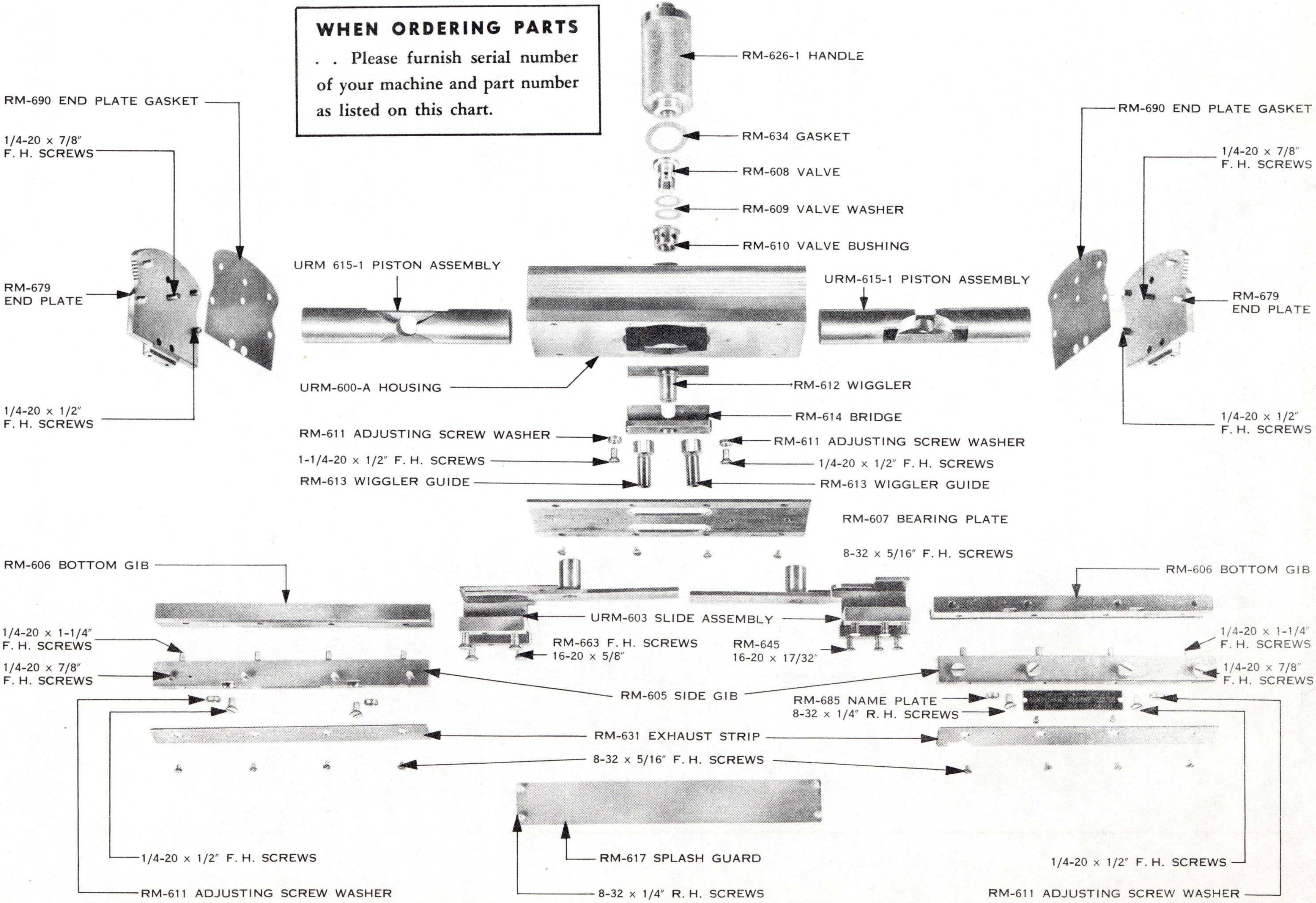
Operation of lubricator is automatic. Only requirements are to fill the reservoir with a good grade of No. 20 oil and adjust the needle valve for distribution of oil at the rate of ¾ drop per minute per machine — equivalent to a valve setting of *3 drops in 4 minutes.*

SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL.
A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

MODEL 600 HEAVY DUTY SANDING AND RUBBING MACHINE

WHEN ORDERING PARTS

. . Please furnish serial number of your machine and part number as listed on this chart.


RM-626-1 HANDLE
RM-634 GASKET
RM-608 VALVE
RM-609 VALVE WASHER
RM-610 VALVE BUSHING
RM-690 END PLATE GASKET
1/4-20 x 7/8" F. H. SCREWS
RM-679 END PLATE
1/4-20 x 1/2" F. H. SCREWS
URM 615-1 PISTON ASSEMBLY
URM-600-A HOUSING
URM-615-1 PISTON ASSEMBLY
RM-690 END PLATE GASKET
1/4-20 x 7/8" F. H. SCREWS
RM-679 END PLATE
1/4-20 x 1/2" F. H. SCREWS
RM-612 WIGGLER
RM-614 BRIDGE
RM-611 ADJUSTING SCREW WASHER
1-1/4-20 x 1/2" F. H. SCREWS
RM-613 WIGGLER GUIDE
RM-611 ADJUSTING SCREW WASHER
1/4-20 x 1/2" F. H. SCREWS
RM-613 WIGGLER GUIDE
RM-607 BEARING PLATE
8-32 x 5/16" F. H. SCREWS
RM-606 BOTTOM GIB
RM-606 BOTTOM GIB
URM-603 SLIDE ASSEMBLY
1/4-20 x 1-1/4" F. H. SCREWS
1/4-20 x 7/8" F. H. SCREWS
RM-663 F. H. SCREWS 16-20 x 5/8"
RM-645 16-20 x 17/32"
1/4-20 x 1-1/4" F. H. SCREWS
1/4-20 x 7/8" F. H. SCREWS
RM-605 SIDE GIB
RM-685 NAME PLATE
8-32 x 1/4" R. H. SCREWS
RM-631 EXHAUST STRIP
8-32 x 5/16" F. H. SCREWS
1/4-20 x 1/2" F. H. SCREWS
RM-617 SPLASH GUARD
1/4-20 x 1/2" F. H. SCREWS
RM-611 ADJUSTING SCREW WASHER
8-32 x 1/4" R. H. SCREWS
RM-611 ADJUSTING SCREW WASHER

MODEL 600 *Two Pad—Heavy Duty—Straight Line Action*

Part Number	Description	Number Used Per Machine	Net Price Each
URM-600-A	Housing (includes RM-610 Valve Bushing)	1	$70.00
URM-603	Slide Assembly	2	35.00
RM-607	Bearing Plate	1	15.00
RM-608	Valve	1	6.50
RM-609	Valve Washer	2	.25
RM-610	Valve Bushing	1	5.50
RM-611	Adjusting Screw Washer	6	.40
RM-612	Wiggler	1	10.50
RM-613	Wiggler Guide	2	7.00
RM-614	Bridge	1	11.50
URM-615-1	Piston Assembly	2	15.00
RM-617	Splash Guard	1	1.75
RM-626-1	Handle	1	13.00
RM-631	Exhaust Strip	2	.90
RM-634	Gasket (for handle)	1	.10
RM-645	16-20 x 17/32″ F.H. Screws (for URM-633 and 643 shoes)	8	.05
RM-663	16-20 x ⅝″ Flat Head Screws (for URM-689 shoes)	8	.12
URM-668	Gib Assembly	2	14.50
RM-679	End Plate	2	8.50
RM-685	Name Plate	1	.40
RM-690	End Plate Gasket	2	.10

SCREWS

C-2001	8-32 x ¼″ R.H. Screws (for Splash Guard)	4	.05
C-2039	5-40 x ¼″ R.H. Screws (for Name Plate)	2	.05
C-2177	8-32 x 5/16″ F.H. Screws (for Exhaust Strip)	8	.05
C-2177	8-32 x 5/16″ F.H. Screws (for Bearing Plate)	4	.05
C-2158	¼-20 x ½″ F.H. Screws (for End Plate)	8	.05
C-2158	¼-20 x ½″ F.H. Screws (for Bridge)	2	.05
C-2158	¼-20 x ½″ F.H. Screws (for Gibs — old style)	4	.05
C-2193	¼-20 x 1¼″ F.H. Screws (for Side Gibs — old style)	8	.05
——	¼-20 x ⅞″ F.H. Screws (for Bottom Gib — old style)	8	.05
C-2301	¼-20 x 1″ A.H. Cap Screws (for New Style Gib)	8	.11
C-2160	¼-20 x ¾″ F.H. Screws (for End Plates)	2	.05

Prices are net, f.o.b. Rockford, Illinois. **Subject to change without notice.** **Minimum Billing $2.50**

SUNDSTRAND SUNDSTRAND PNEUMATIC DIVISION . . . 1020 9th STREET
ROCKFORD, ILL. SUNDSTRAND

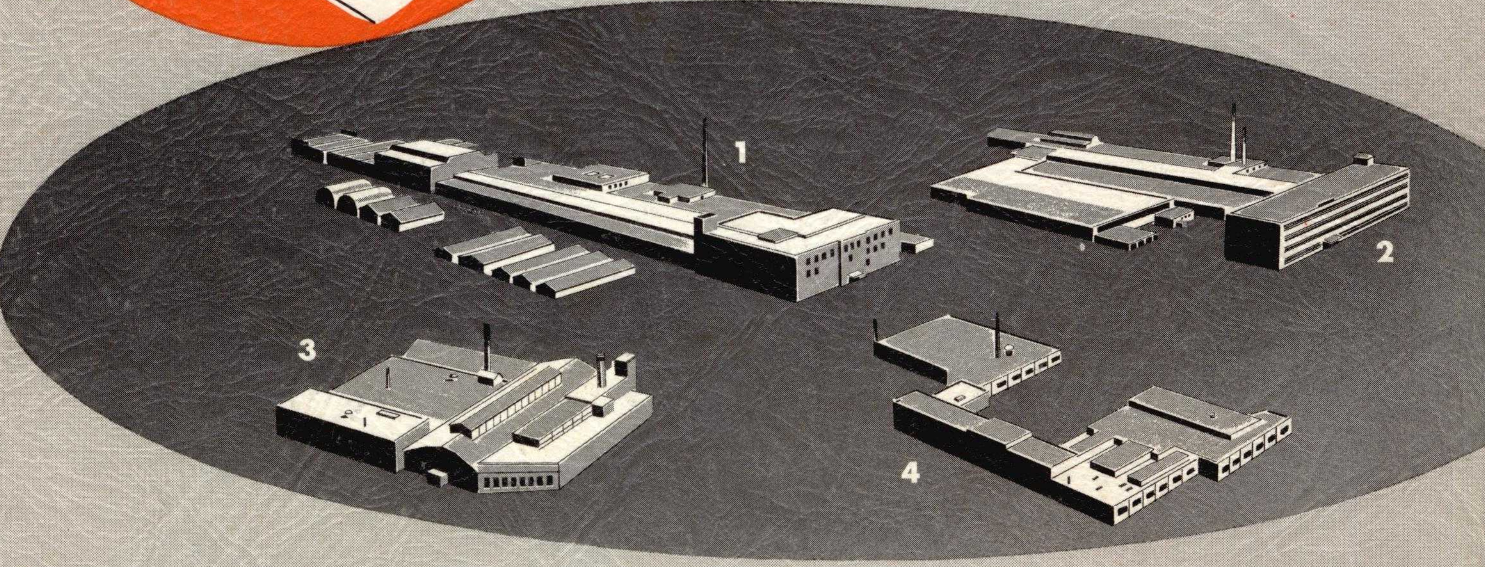
A DIVISION OF SUNDSTRAND MACHINE TOOL CO.

REPRESENTED BY
MINNESOTA SUPPLY COMPANY
706 Portland Avenue
Minneapolis 15, Minnesota

SUNDSTRAND

"A name to remember"

1. **Plant No. 1—Rockford, Illinois**
2. **Plant No. 2—Rockford, Illinois**
3. **Plant No. 3—Rockford, Illinois**
4. **Plant No. 4—subsidiary American Broach & Machine Company, Ann Arbor, Michigan**



PRODUCTS: Pneumatic Sanding and Polishing Machines • Bench Centers • Balancing Tools Lathes • Milling Machines • Centering Machines • Special Machinery • Broaching Tools Broaching Machines • Presses • Magnetic Chucks • Coolant Separators • Magnetic Lifts Aircraft and Industrial Hydraulic Transmissions • Pumps • Control Valves • Fluid Motors Fuel Pumps • Oil Burner Pumps